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Docket No.: 249768002US2  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Hartman et al.

Application No.: 09/318,447

Confirmation No.: 1430

Filed: May 25, 1999

Art Unit: 3625

For: METHOD AND SYSTEM FOR PLACING A  
PURCHASE ORDER VIA A  
COMMUNICATIONS NETWORK

Examiner: M. A. Fadok

**TRANSMITTAL OF REPLACEMENT APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief dated August 8, 2006 and Applicant's telephone conference with Leneetha L. Dyer, Patent Appeals Specialist, on August 10, 2006, Applicant respectfully submits a replacement Appeal Brief. In accordance with Ms. Dyer's request, the Claims Appendix in the replacement Appeal Brief does not include the text of the claims not involved in the appeal. As a result, the Claims Appendix does not include the text of non-appealed independent claim 158 from which appealed claims 159-163 depend. Applicant apologizes to the Board for any inconvenience this may cause.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 249768002US2 from which the undersigned is authorized to draw.

Dated: 8/16/06

Respectfully submitted,

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**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
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Sir:

As required under 37 C.F.R. § 41.37(a), this brief is in furtherance of the Notice of Appeal<sup>1</sup> in this case filed on January 9, 2006. The fees required under 37 C.F.R. § 41.20(b)(2), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

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<sup>1</sup> This is a reinstatement of the appeal previously noticed on September 13, 2004. The undersigned attorney, David T. Dutcher, was advised by Mark Polutta and Kery Fries of the Office of Patent Legal Administration in a telephone conference on December 23, 2005 that the patent term extension for the present appeal will be calculated from the Notice of Appeal filed on September 13, 2004.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37. The complete Table of Contents follows.

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## I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Amazon.com, Inc.

## II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

The present application is a continuation application of U.S. Patent No. 5,960,411, which was the subject of the following judicial proceedings: *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 73 F. Supp. 2d 1228, 53 U.S.P.Q.2d 1115 (W.D. Wash. 1999); and *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 57 U.S.P.Q.2d 1747 (Fed. Cir. 2001). The United States Patent and Trademark Office has granted a request for re-examination of U.S. Patent No. 5,960,411. Applicants, applicants' legal representative, and the real party in interest are unaware of any other appeal, interference, or judicial proceeding that may relate to, directly affect or be directly affected by, or have a bearing on the Board's decision in the present appeal.

## III. STATUS OF CLAIMS

Claims 108-183 are pending in the present application. Claims 108-123, 126-137, 151-156, 159-163, and 176-183 are the subject of this appeal.<sup>2</sup> Claims 1-107 have been canceled.

## IV. STATUS OF AMENDMENTS

Applicants have not filed any amendments subsequent to the last Office Action mailed October 7, 2005.

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<sup>2</sup> Applicants are not appealing the rejection of claims 124-125, 138-150, 157-158, and 164-175 at this time to simplify the issues for this appeal. Applicants reserve the right to pursue these claims in a continuing application.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

### A. Overview of the Invention and Prior Art

#### 1. The Invention

Aspects of applicants' invention facilitate ordering items over an electronic network, such as the Internet. (See, e.g., Specification, 1:5-7.) Many individuals have concerns about ordering items over the Internet for several reasons. (See, e.g., Specification, 2:24-26.) First, some individuals are concerned about the security of their personal information when purchasing an item over the Internet. (See, e.g., Specification, 2:24-27.) In an effort to increase the security of Internet purchases, some websites require users to perform time-consuming authentication procedures. These procedures may increase security, but they also reduce the convenience of purchasing goods over the Internet. Second, some individuals are concerned about the cumbersome nature of Internet purchases. For example, it is burdensome for a purchaser to keep track of numerous pending orders from a website.

Aspects of applicants' invention increase the efficiency and improve the security of ordering items over an electronic network. For example, in one embodiment, a server system collects and stores purchaser-specific order information (e.g., name, home address, shipping address, phone number, and credit card number), and assigns a unique client identifier that is stored at the client system. (See, e.g., Specification, 4:2-4 and 5:16-18.) When a purchaser wants to place an order, the purchaser need only perform a single action (e.g., click a mouse button) to order the item, and the client system sends a request to order the item along with the client identifier. (See, e.g., Specification, 4:4-9.) The server system then completes the order by adding the purchaser-specific order information associated with that client identifier to the item order information. (See, e.g., Specification, 4:9-11.) Because the client system includes the client identifier with a request to order, there is no need for the purchaser to log in to the server system. (See, e.g., Specification, 7:1-3.) This process increases the efficiency of ordering items by limiting the information the user inputs to order the items. (See, e.g., Specification, 5:11-13.) The process also improves the security of ordering items

because sensitive personal information is transmitted over the Internet or other electronic network only once and not each time an order is placed. (See, e.g., Specification, 7:20-22.)

When the purchaser wants to change the purchaser-specific order information (e.g., name, home address, shipping address, phone number, and credit card number) stored at the server system, the purchaser logs in to the server system. (See, e.g., Specification, 7:15-18.) Because a log in is needed before the purchaser-specific order information can be changed, an unauthorized user who purchases items using the client system (and the client identifier stored at the client system) cannot change the shipping address or other purchaser-specific order information. (See, e.g., Specification, 7:16-22.) This feature increases the security of the system and deters theft because the items ordered without logging in are sent to the previously supplied shipping address. When the person at the shipping address receives an item ordered by the unauthorized user, that person will likely be able to detect the unauthorized use. Accordingly, this aspect of the invention (a) increases the efficiency of placing orders by not requiring a user to log in when ordering an item, and (b) improves security by requiring a user to log in when changing account information.

Another aspect of applicants' invention simplifies the process of ordering items over an electronic network. For example, in one embodiment, a client system receives a client identifier from a server system and persistently stores the client identifier. (See, e.g., Specification, 4:3-4.) The client identifier identifies account information of a purchaser. (See, e.g., Specification, 9:20-23.) The client system also displays information identifying an item for purchase and displays an indication of a single action that is to be performed to order the identified item. (See, e.g., Specification, 4:4-7.) When the purchaser wants to place an order, the purchaser need only perform the single action and the client system sends to the server system a request to order the identified item and the client identifier. (See, e.g., Specification, 4:4-7.) If the purchaser places several orders within a specific time period, the server system automatically combines the orders into a single order. (See, e.g., Specification, 8:20-22.) As a result, the purchaser need only track a single order having multiple items rather than multiple orders

each having one item. Furthermore, if the purchaser decides not to purchase one or more of the items, the purchaser can modify a single order rather than having to modify several orders. Accordingly, this feature simplifies the process of ordering items over the electronic network.

## 2. The Joseph Reference

Joseph discloses an interactive television system that broadcasts a home shopping show. (Joseph, 8:22-24.) "When a viewer wishes to order an item, a button is pressed on the TV remote control. This button signals the client computer 22 to display a series of instructions and menus necessary to solicit the information necessary to place the order, e.g. the item number, name and address of the viewer, the method of payment, the credit card number (if needed), etc." (Joseph, 8:34-40.) The viewer enters the information via the TV remote control. (Joseph, 8:45-46.) "When the information requested by the on-screen display and/or voice instructions has been entered by the viewer, it is sent to a central computer via the modem in the client computer." (Joseph, 8:46-49.) Because the viewer provides their personal information with the order, the viewer does not log in to the central computer to place the order.

"It is also possible that permanent information about the viewer (i.e. the name, address, method of payment and credit card number) may be preentered once by the viewer, so it is not necessary to solicit that information each time an order is placed." (Joseph, 8:52-56.) This information is stored in a permanent memory in the client computer. (Joseph, 8:56-57.) "In such a case, when an order is placed, that information is retrieved from the permanent memory, appended to the item number and transmitted to the central computer." (Joseph, 8:57-60.) "In such a case, the viewer will be able to order [an item] by simply pressing one button on the TV remote control. In response, the client computer can combine the previously received information related to the item currently being offered for sale with the previously stored personal information related to the viewer, and transmit the order to the central computer and receive the confirmation in return." (Joseph, 8:63-9:2.) The viewer can subsequently update/change the information stored in the permanent memory of the client computer. Because the client computer

appends the viewer's personal information to the order, the viewer does not log in to the central computer to place the order. In fact, Joseph is silent regarding logging in to the central computer, the client computer, or any other computer.

### 3. The Teper Reference

Teper discloses a system for allowing "users to purchase online services from the [Service Provider] sites directly, without having to transmit payment information and other personal information over the distributed network, and without having to reveal such information to the Service Providers from which the online services are purchased." (Teper, 2:38-43.) Before purchasing goods and/or services from a Service Provider ("SP"), the user registers with an Online Brokering Service. (Teper, 2:57-60.) During registration, the user provides "various account information to the Online Broker, such as payment information (e.g., credit card number), name, address and phone number. This information is maintained in a brokering database at the Online Broker site, and is not exposed to the Service Providers." (Teper, 2:62-67.) The user also selects a password, and the Online Brokering Service assigns a unique ID such as a user name, which can be mapped to the user only by the Online Brokering Service. (Teper, 2:67-3:2.) "The password and unique ID are stored in the brokering database, and are used to authenticate registered users." (Teper, 3:2-4.)

In operation, the user must log in to a registered SP site using the password and unique ID before the user can purchase online goods and/or services. More specifically, after the user connects to a registered SP site, the SP site sends a challenge message to the user's computer over the Internet, "and the user computer responds by generating and returning a cryptographic response message. The cryptographic response message is preferably based on both the challenge message and the user's password (which is entered manually by the user). This response message is essentially meaningless to the SP site, but contains the information needed by the Online Brokering Service to authenticate the user. The SP site forwards the response message to the Online Broker site along with the user's unique ID (which the SP site obtains from the user computer) and the original challenge message." (Teper, 3:11-22.) The Online Brokering Service in

turn authenticates the user. After the authentication, "the Online Brokering Service preferably sends an anonymous session ID to the SP site to allow the SP site to anonymously bill the user for services subsequently purchased." (Teper, 3:31-34.) Accordingly, the user must log in to the registered SP site before the user can purchase online goods and/or services.

After the user purchases goods and/or services from the SP, "the SP site sends billing events to the Online Brokering Service, with each billing event specifying both the anonymous session ID and a charge to be applied to the user's account." (Teper, 3:36-39.) The user can subsequently log in to the Online Brokering Service to change account information or "view an account statement which shows all of the charges from all of the registered SP sites accessed by the user." (Teper, 3:42-44.) Accordingly, in Teper's system, a user must log in to the SP before purchasing online goods and/or services, and the user must log in to the Online Brokering Service before changing account information.

#### B. Independent Claims on Appeal

The rejected independent claims are directed to methods and systems for ordering items. The independent claims are described as follows:

##### 1. Claim 108

Claim 108 is directed to a method in a client system for ordering an item. The method includes receiving from a server system a client identifier of the client system and persistently storing the client identifier at the client system. (See, e.g., Specification, 4:2-4.) When an item is to be ordered, the client system displays information identifying the item and displays an indication of a single action that is to be performed to order the identified item. (See, e.g., Specification, 4:4-7.) In response to the single action being performed, the client system sends to the server system a request to order the identified item along with the client identifier. (See, e.g., Specification, 4:7-9.) The client identifier identifies account information previously supplied by a user of the client system. (See, e.g., Specification, 9:14-28.) As such, the user does not need to log in to the server system when ordering the item. (See, e.g., Specification, 7:1-3.) When account information is to be changed, the client system coordinates the log in of the user to the

server system, receives updated account information, and sends the updated account information to the server system. (See, e.g., Specification, 7:15-22.) Accordingly, the user does not need to log in to the server system when ordering the item, but needs to log in to the server system when changing previously supplied account information. (See, e.g., Specification, 7:1-3 and 15-22.)

2. Claim 126

Claim 126 is directed to a method in a client system for ordering items. The method includes receiving from a server system a client identifier of the client system and persistently storing the client identifier at the client system. (See, e.g., Specification, 4:3-4.) For each of a plurality of items, the client system further displays information identifying the item and displays an indication of a single action that is to be performed to order the identified item. (See, e.g., Specification, 4:4-7.) In response to the single action being performed, the client system sends to the server system a request to order the identified item and the client identifier. (See, e.g., Specification, 4:7-9.) The client identifier identifies account information of a user. (See, e.g., Specification, 9:20-23.) The server computer automatically combines multiple orders into a single order. (See, e.g., Specification, 8:20-22.)

3. Claim 151

Claim 151 is directed to a client system for ordering an item. The system includes a component that receives from a server system a client identifier of the client system and that stores the client identifier persistently, and a component that orders an item by displaying information identifying the item along with an indication of a single action that is to be performed to order the identified item and by sending to the server system a request to order the identified item along with the client identifier. (See, e.g., Specification, 4:3-9.) The client identifier identifies account information previously supplied by a user so that the user does not need to log in to the server system when ordering the item. (See, e.g., Specification, 9:20-23; 7:1-3.) The client system further includes a component that updates account information by coordinating the log in of the user to the server system, receiving updated account information from the user, and

sending the updated account information to the server system. (See, e.g., Specification, 7:15-22.)

4. Claim 176

Claim 176 is directed to a method in a computer for ordering an item. The method includes providing to a client system a client identifier for the client system. (See, e.g., Specification, 4:3-4.) The client identifier is associated with account information of a user and for persistent storage at the client system. (See, e.g., Specification, 9:20-23.) When an item is to be ordered, the computer provides to the client system a display page identifying the item. (See, e.g., Specification, 4:4-5.) The display page also includes an indication of a single action that is to be performed to order the identified item. (See, e.g., Specification, 4:5-7.) The computer also receives from the client system an indication that the user performed the single action along with the client identifier, and generates an order for the identified item using the account information associated with the received client identifier so that the user does not need to log in to the computer system to order the item. (See, e.g., Specification, 4:7-11.) When account information is to be changed, the computer coordinates the log in of the user to the computer system, receives from the client system updated account information, and updates the account information associated with the client identifier of the logged in user based on the received updated account information. (See, e.g., Specification, 7:15-22.)

1.

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL<sup>3</sup>

### A. The Examiner's Rejections

1. The Examiner rejected claims 108-123, 126-137, 151-156, 159-163, and 176-183 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 5,960,411 ("Hartman") in view of U.S. Patent No. 5,893,076 ("Hafner").<sup>4</sup>

2. The Examiner rejected claims 108-117, 151-156, and 176-183 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,819,034 ("Joseph") in view of U.S. Patent No. 5,815,665 ("Teper") and Official Notice.

3. The Examiner rejected claims 118-123, 126-137, and 159-163 under 35 U.S.C. § 103(a) as being unpatentable over Joseph in view of Teper, Official Notice, and Hafner.

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<sup>3</sup> The Examiner also alleges that the present application fails to include a priority claim. In a Preliminary Amendment filed with the present application on May 25, 1999, the specification was amended to include the following:

#### CROSS-REFERENCE TO PRIOR APPLICATION

This application is a continuation of U.S. Patent Application No. 08/928,951, filed September 12, 1997, and allowed March 29, 1999, which is hereby incorporated by reference.

Accordingly, the present application includes a proper priority claim. The filing receipt indicates the proper priority claim.

<sup>4</sup> Although the Office Action recites, "Claims 108-183 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 5,960,441 in view of Webber, Jr. (6,167,378)" (Office Action, Oct. 7, 2005, p. 6), the Examiner indicated in a telephone conference on January 2, 2006 that the Office Action includes an error and the double patenting rejection is over claims 1-26 of U.S. Patent No. 5,960,411 in view of Hafner.

B. The Issues on Appeal

1. Whether the Examiner has established obviousness-type double patenting for the claims over the combination of claims 1-26 of Hartman, Hafner, and Official Notices:

a. when the Examiner has not addressed the combination of not requiring log in to order an item, but requiring log in when changing account information;

b. when the Examiner has not mentioned the "automatically" combining language of the claims;

c. when the Examiner's suggested motivating benefit of assuring that orders are processed in a timely manner does not result from or necessarily lead to the suggested combination; and

d. when the Examiner's suggested motivating benefit of allowing orders to be combined in a manner that is optimized does not necessarily lead to the suggested combination.

2. Whether the combination of Joseph and Teper suggests that a user does not need to log in to a server system when placing an order, but the user does need to log in to the server system when changing previously supplied account information. The decision on this issue impacts claims 108-123, 151-156, and 176-183.

3. Whether the combination of Joseph and Teper suggests receiving from a server system a client identifier of the client system, persistently storing the client identifier at the client system and, when an item is to be ordered, sending to the server system a request to order the identified item along with the client identifier. The decision on this issue impacts claims 108-123, 136-137, 151-156, 159-163, and 176-183.

4. Whether Hafner or Joseph suggests automatically combining orders placed using single-action ordering into a single order. The decision on this issue impacts claims 118-123, 126-137, 156, and 159-163.

## VII. ARGUMENTS

### A. Obviousness-Type Double Patenting Rejection

The Examiner rejected claims 108-123, 126-137, 151-156, 159-163, and 176-183 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of Hartman in view of Hafner. It is the Examiner's position that:

The claims of Patent "411" teach placing single action orders over an electronic network and the other claimed features of the instant application, but does not specifically mention that the orders are combined or that a log in is required before server level information can be changed by the customer.

Hafner teaches a method and system for consolidating orders from multiple orders (col 8, lines 1-28 and col 10, lines 20-30). It would have been obvious to a person having ordinary skill in the art at the time of the invention to include in the claims of "411" the consolidation capability as taught by Hafner, because this would facilitate increased optimization by better controlling inventory and shipping costs.

(Office Action, Oct. 7, 2005, p. 6.)

#### 1. Discussion of Issues

- a. The Examiner has failed to adequately address the limitation of the claims that do not require a user to log in when ordering an item, but require a user to log in when changing account information

Many of the claims are directed to selectively requiring log in by not requiring a user to log in when ordering an item, but requiring a user to log in when changing account information. For example, claim 108 recites, "in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier . . . wherein the user does not need to log in to the server system when ordering the item" and "when account information is to be changed, coordinating the log in of the user to the server system." The Examiner has not pointed to anything in the claims of the '411 patent or in the specification or drawings of Hafner

that corresponds to not requiring a log in to order an item, but requiring a log in to change account information. Rather,

[t]he examiner takes Official Notice that it was old and well known in the art at the time of the invention to have a remote storage site containing personal information authenticate users before information could be changed. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include the coordination by the server of changes to stored personal data, because authenticating the user would assure that only the user that provided the information could change it, therefore, creating more security of personal information and preventing others from stealing or manipulating the otherwise secure data.

(Office Action, Oct. 7, 2005, p. 7.) Although the Examiner takes Official Notice that it was well known to authenticate users before enabling users to change personal information, the Examiner fails to mention not requiring a user to log in when ordering an item, nor does the Examiner provide any motivation to combine (a) requiring a user to log in when changing account information, and (b) not requiring a user to log in when ordering an item. Thus, the Examiner has not established a *prima facie* case of unpatentability of these claims.

To establish an obviousness-type double patenting rejection, the Examiner is required to make clear:

(A) The differences between the inventions defined by the conflicting claims—a claim in the patent compared to a claim in the application; and

(B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

(MPEP § 804 II.B.1.) The Examiner has performed neither of these tasks for the selectively requiring log in language of these claims. As a result, the Examiner has not addressed a significant difference between the claims of the '411 patent and these claims that is the combination of not requiring a log in to order an item, but requiring a log in to update account information. Thus, the Examiner has not provided any reason why a person skilled in the art would conclude that this combination is obvious.

b. The Examiner has failed to address the "automatically" combining difference between Hafner and the claims

Many of the claims are directed to automatically combining orders. For example, claim 126 recites that "the server computer automatically combines orders into a single order." The Examiner has not established a *prima facie* case of obviousness-type double patenting because the Examiner has not attempted to address the "automatically" combining orders difference between the claims of the '411 patent and these claims. The Examiner does not even mention the "automatically" combining difference between the claims of the '411 patent and the pending claims. Indeed, Hafner does not automatically combine multiple orders into a single order; rather, Hafner discloses enabling a supplier and a retailer to manually review and change suggested orders at the supplier's server to consolidate orders. (Hafner, 6:67-7:4 and 8:19-23.) The suggested orders are generated by a replenishment system and communicated to the supplier's server. (Hafner, 6:17-29.) After receiving the suggested orders, the supplier either approves the suggested orders or changes the suggested orders to, for example, consolidate the orders. (Hafner, 6:29-32 and 8:19-23.) Although the supplier's server can automatically approve the suggested orders, the supplier or the retailer must manually change the suggested orders at the supplier's server to consolidate the orders. (Hafner, 5:56-60 and 6:74-7:1.) Accordingly, Hafner neither teaches nor suggests automatically combining multiple orders into a single order.

In addition, the Examiner's suggested motivating benefit for combining Hafner's consolidating orders feature with the claims of the '411 patent does not support his conclusion as to obviousness of the claims. The Examiner suggests that one would be motivated to make the combination because it would "facilitate increased optimization by better controlling inventory and shipping costs." (Office Action, Oct. 7, 2005, p. 6.) First, applicants do not understand how consolidating orders would help control inventory costs. It would seem that, if two orders are consolidated and shipped together, inventory costs could only increase. In particular, if orders are consolidated, then presumably none of the goods could be shipped until all the goods are in inventory. As a result, goods that could have been shipped if the orders were not consolidated, would have to be stored in

inventory until all the goods for the consolidated orders arrived in inventory, which would increase inventory cost. Second, if one wanted to control shipping costs, one would likely consider consolidating deliveries, not orders. Consolidating deliveries (e.g., shipping different deliveries in the same truck) rather than orders would be more flexible in that it would allow deliveries for different customers to be consolidated with the possibility of saving shipping costs. For example, deliveries for different customers in the same general geographic area (e.g., city) could be consolidated by placing the goods to be delivered on the same delivery truck. Even for the same customer's orders, one could hold the orders until all are ready for delivery and combine the deliveries, rather than combining the orders. Thus, the suggested motivating benefits either do not result from or necessarily lead to the suggested combination.

- c. The Examiner's suggested motivating benefit of assuring that orders are processed in a timely manner does not result from the suggested combination

Several claims are directed to combining orders that are placed within a certain time interval. For example, claim 127 recites that "requested orders are combined when sent within a certain time interval." With respect to this claim feature, the Examiner states:

The combination of "441" [sic] and Hafner teaches consolidating orders, but does not specifically mention all the time intervals and availability items of the instant claims. First, the examiner notes that the applicant's disclosure states that "one skilled in the art would appreciate that the single action orders can be combined in various ways based on other factors, such as size of shipment and intermediate-term availability" (page 12, lines 9-12). Likewise, the examiner takes Official Notice that it was old and well known in the art at the time of the invention to place time intervals on processing time and combining deliveries/orders based on availability. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include in the combination of "441"/Hefner [sic] placing time intervals on processing time and combining deliveries/orders based on availability, because this would assure that the orders are processed in a timely manner and would also allow orders to be combined in a manner that is optimized.

(Office Action, Oct. 7, 2005, pp. 6-7.)

The Examiner correctly notes that Hafner does not mention that time intervals are used for combining orders. The Examiner, however, inexplicably relies on applicants' own disclosure of the invention to reject these claims. In describing the invention, applicants mention that "[o]ne skilled in the art would appreciate that the single-action orders can be combined in various ways based on other factors." (Specification, 12:9-10.) This statement means that upon reading applicants' disclosure of the invention one skilled in the art would appreciate that single-action orders can be combined in various ways. The Examiner is impermissibly using applicants' own disclosure to reject these claims.

The Examiner takes Official Notice that it was well known "to place time intervals on processing time." (Office Action, Oct. 7, 2005, p. 6.) Applicants do not understand what it means "to place time intervals on processing time." Moreover, applicants do not understand how this Official Notice in any way relates to combining orders that are placed within a certain time interval as recited by these claims.

In addition, the Examiner's suggested motivating benefit for further combining the claims of the '411 patent and Hafner with placing "time intervals on processing time" does not support his conclusion as to obviousness of the claims. The Examiner's suggested motivating benefit for this combination is that "this would assure that the orders are processed in a timely manner." (*Id.* at 7.) It is not clear how waiting for a time interval to elapse would assure that an order would be processed in a timely manner. Rather than delaying a time interval, it would seem that one would want to process an order immediately upon placement of the order to ensure that it is "processed in a timely manner." Thus, the suggested motivating benefit does not result from the suggested combination.

- d. The Examiner's suggested motivating benefit of allowing orders to be combined in a manner that is optimized does not necessarily lead to the suggested combination

Several claims recite that orders are combined based on availability. For example, claim 129 recites that "the requested orders are combined when the requested items

have similar availability." The Examiner has not provided a sufficient motivation for a combination that includes the purported facts of which he is taking Official Notice. As discussed above, the Examiner impermissibly relies on applicants' own disclosure when attempting to show that this difference would be obvious.

The Examiner takes Official Notice that it was well known to combine "deliveries/orders based on availability." (Office Action, Oct. 7, 2005, p. 7.) Applicants do not understand of what precisely the Examiner is taking Official Notice. The Examiner appears to be equating deliveries with orders. A delivery and an order are very different concepts. The claims recite combining "orders," not combining "deliveries." Applicants agree that combining deliveries based generally on availability is well known. For example, two deliveries that are available for shipment and are destined for the same general area may be combined on the same truck for delivery. But, it cannot be inferred from the combining of deliveries that the orders are also combined based on availability.

In addition, the Examiner's suggested motivating benefit for combining the claims of the '411 patent and Hafner with "combining deliveries/orders based on availability" does not support his conclusion as to obviousness of the claims. The Examiner's suggested motivating benefit for this combination is that it would "allow orders to be combined in a manner that is optimized." (*Id.* at p. 7.) The Examiner, however, does not provide any explanation as to what would be optimized. If shipping costs were being optimized, the same cost benefit would come from combining deliveries based on availability without having to consolidate orders and would be more flexible as discussed above. So, one would have no reason to combine orders, as opposed to deliveries, to save shipping costs. Thus, the suggested motivating benefit does not necessarily lead to the suggested combination.

2. Discussion of Claims<sup>5</sup>

a. Claims 108-118, 151-156, and 176-183

Claims 108-118, 151-156, and 176-183 are directed to not requiring a user to log in when ordering an item, but requiring a user to log in when changing account information. For example, claim 108 recites, "in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier . . . wherein the user does not need to log in to the server system when ordering the item" and "when account information is to be changed, coordinating the log in of the user to the server system." As discussed above in Section 1.a, the Examiner has failed to adequately address the limitation of the claims that do not require a user to log in when ordering an item, but require a user to log in when changing account information. Accordingly, the obviousness-type double patenting rejection of claims 108-118, 151-155, and 176-183 should be reversed.

b. Claims 119-120

Claims 119-120 depend from claim 118 and are not obvious for the same reason as claim 118. In addition, these claims recite that orders are combined when sent within a certain time interval. For example, claim 119 recites that "requests are combined when sent within a certain time interval." As discussed above in Section 1.c, the Examiner's suggested motivating benefit of ensuring that orders are processed in a timely manner does not result from combining orders sent within a certain time interval. In addition, the Examiner impermissibly relies on applicants' own disclosure as motivation for the suggested combination. Thus, the obviousness-type double patenting rejection of these claims should be reversed.

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<sup>5</sup> Applicants specify groupings of the claims pursuant to 37 C.F.R. § 41.37(c)(vii) based on applicants' understanding of the Examiner's rationale for the rejection of the claims, both obviousness and double patenting. If the rationale changes, applicants reserve the right to regroup the claims.

c. Claims 121-123

Claims 121-123 depend from claim 108 and are not obvious for the same reason as claim 108. In addition, these claims recite including an "item in an order with another item with similar availability." As discussed above in Section 1.d, the Examiner's suggested motivating benefit of allowing orders to be combined in a manner that is optimized does not necessarily lead to combining orders with similar availability. In addition, the Examiner impermissibly relies on applicants' own disclosure as motivation for the suggested combination. Thus, the obviousness-type double patenting rejection of claims 121-123 should be reversed.

d. Claims 126 and 132-137

Claims 126 and 132-137 recite that "the server computer automatically combines orders into a single order." As discussed above in Section 1.b, the Examiner has failed to address the "automatically" combining difference between Hafner and the claims. In addition, the suggested motivating benefits of better controlling inventory and shipping costs do not result from or necessarily lead to the combining of orders. Thus, the obviousness-type double patenting rejection of claims 126 and 132-137 should be reversed.

e. Claims 127-128

Claims 127-128 depend from claim 126 and are not obvious for the same reasons as claim 126. In addition, these claims recite that orders are combined when sent within a certain time interval. For example, claim 127 recites that "requested orders are combined when sent within a certain time interval." As discussed above in Section 1.c, the Examiner's suggested motivating benefit of assuring that orders are processed in a timely manner does not necessarily result from combining orders sent within a certain time interval. In addition, the Examiner impermissibly relies on applicants' own disclosure as motivation for the suggested combination. Thus, the obviousness-type double patenting rejection of claims 127-128 should be reversed.

f. Claims 129-131

Claims 129-131 depend from claim 126 and are not obvious for the same reasons as claim 126. In addition, these claims recite that "the requested orders are combined when the requested items have similar availability." As discussed above in Section 1.d, the Examiner's suggested motivating benefit of allowing orders to be combined in a manner that is optimized does not necessarily lead to combining orders based on availability. In addition, the Examiner impermissibly relies on applicants' own disclosure as motivation for the suggested combination. Thus, the obviousness-type double patenting rejection of claims 129-131 should be reversed.

g. Claims 159-160

Claims 159-160 are directed to combining orders that are placed within a certain time interval. For example, claim 159 recites that "requested orders are combined into a single order when received within a certain time interval." As discussed above in Section 1.c, the Examiner's suggested motivating benefit of assuring that orders are processed in a timely manner does not result from combining orders sent within a certain time interval. In addition, the Examiner impermissibly relies on applicants' own disclosure as motivation for the suggested combination. Thus, the obviousness-type double patenting rejection of claims 159-160 should be reversed.

h. Claims 161-163

Claims 161-163 recite that "the requested orders are combined into a single order when the requested items have similar availability." As discussed above in Section 1.d, the Examiner's suggested motivating benefit of allowing orders to be combined in a manner that is optimized does not necessarily lead to combining orders with similar availability. In addition, the Examiner impermissibly relies on applicants' own disclosure as motivation for the suggested combination. Thus, the obviousness-type double patenting rejection of claims 161-163 should be reversed.

B. Obviousness Rejections

1. Legal Standards for Obviousness

All the claims on appeal stand rejected as obvious under 35 U.S.C. § 103(a). 35 U.S.C. § 103(a) provides:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

"[T]he [E]xaminer bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d (BNA) 1955, 1956 (Fed. Cir. 1993). "A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *Id.* (quoting *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d (BNA) 1529, 1531 (Fed. Cir. 1993)).

To establish a *prima facie* case of obviousness, the Examiner must (1) identify prior art references that disclose all the elements of the claims, and (2) provide a suggestion or motivation to modify the references to produce the claimed invention. (MPEP § 2143.) With respect to the second requirement, the Examiner must provide a suggestion or motivation to combine from within the prior art, and may not rely on hindsight gleaned from applicants' invention itself. See, e.g., *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1050-51, 5 U.S.P.Q.2d 1434, 1438 (Fed. Cir. 1988).

Under these standards, applicants' invention would not have been obvious. The Examiner has not identified prior art references that disclose all the elements of the pending claims. The Examiner also has not provided any motivation from within the prior art to modify the cited references so as to produce the claimed invention. Therefore, the rejection of the claims should be reversed.

## 2. Discussion of Issues

- a. Joseph and Teper fail to disclose or suggest not requiring a user to log in when ordering an item, but requiring a user to log in when changing account information

Many of the claims are directed to not requiring a user to log in when ordering an item, but requiring a user to log in when changing account information. For example, claim 108 recites, "in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier . . . wherein the user does not need to log in to the server system when ordering the item" and "when account information is to be changed, coordinating the log in of the user to the server system; receiving updated account information; and sending the updated account information to the server system." Joseph does not require, or even mention, logging in to place an order or to change account information, and Teper requires logging in to place an order and to change account information. The Examiner's picking and choosing of the no log in to place an order of Joseph and the log in to change account information of Teper is impermissible in the absence of a suggestion or motivation in the prior art to do so. The Examiner is impermissibly using applicants' specification as a template for piecing together prior art features.

Joseph discloses storing information about the viewer (e.g., name, address, method of payment, and credit card number) in the permanent memory of the client computer. The viewer can change or update this information with the TV remote control. As such, the viewer in Joseph's system does not log in to a server system to change account information because the account information is stored at the client computer. In fact, Joseph does not mention logging in to the server computer, the client computer, or any other computer. By contrast, Teper's system requires the user to log in before the user can purchase an item and before the user can change account information. For example, when a user connects to a Service Provider site and attempts to purchase an item, the Service Provider site requires the user to manually enter their password before the purchase is completed. Moreover, when a user connects to the Online Brokering

Service to change or review account information, the Online Brokering Service requires the user to log in. Therefore, Teper's system always requires the user to log in before purchasing an item and before changing account information, and Joseph does not mention logging in.

The Examiner fails to provide a motivation found in the prior art for combining the no log in required to place an order aspect of Joseph's system with the log in required to change account information aspect of Teper's system to create a system that does not require a user to log in when ordering an item but requires a user to log in when changing account information. The Examiner's rationale for combining Joseph and Teper in this way is as follows. First, the Examiner believes that one could modify Joseph to store personal information on a server to save space. Second, since Teper teaches logging in before changing personal information, the Examiner believes that one would be motivated by security issues to combine Teper with Joseph to require logging in to change Joseph's personal information, which is now stored on a server.

The Examiner has not, however, explained why someone concerned with security issues would be motivated to select Teper's logging in to change personal data to improve security, but not select Teper's logging in to purchase an item when it would also improve security. The Examiner cannot pick and choose different aspects of the prior art and combine them to come up with the claimed invention without a motivation or suggestion in the prior art to make the combination. (MPEP § 2143.01.) Neither reference provides such a motivation. Teper requires authentication for purchasing and changing personal information to ensure tight security, and Joseph never requires authentication presumably because the personal information is stored in a set-top box at the viewer's house. Accordingly, there is no motivation to combine Joseph and Teper to create a system that does not require a user to log in when ordering an item but requires a user to log in when changing account information.

- b. Joseph and Teper fail to disclose or suggest receiving from a server system a client identifier of the client system, persistently storing the client identifier at the client system and, when an item is to be ordered, sending to the server system a request to order the identified item along with the client identifier

All the appealed claims are directed to receiving a client identifier from a server system, storing the client identifier, and, in response to a single action being performed, sending the client identifier along with a request to order an item to the server system. For example, claim 108 recites, "receiving from a server system a client identifier of the client system; persistently storing the client identifier at the client system" and "when an item is to be ordered, . . . in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier." The Examiner relies on Joseph as teaching "receiving information from a server system (col 7, lines 33-37) and storing information persistently for transmittal to a server system (col 8, lines 52-60)." (Office Action, Oct. 7, 2005, p. 8.) The Examiner is correct that Joseph receives information from the server system and persistently stores information that is sent to the server system. However, the information that is received (e.g., code modules) is not the information that is sent to the server (i.e., the name, address, method of payment, and credit card number). The claims clearly recite that the same information (i.e., client identifier) that is received from the server system is persistently stored and sent back to the server system. Thus, this characterization of Joseph by the Examiner is technically correct, but it fails to meet the limitation of the claims that the same information that is received from the server is sent back to the server.

The Examiner also recognizes that Joseph does not teach or suggest the storing at a client system of a client identifier provided by a server system. To cure this deficiency, the Examiner suggests that it would be obvious to add Teper's unique user identifier to Joseph. The Examiner's rationale is that "this would free up storage space on the client computer by storing information and programming on the server while still maintaining control of the data at the local client computer." (Office Action, October 7, 2005, p. 8.) There is, however, no suggestion that storage space is a problem at

Joseph's client computer, that such a problem could be remedied by using Teper's unique user identifier, or that the storage burden should be shifted to a server. Moreover, the Examiner's suggestion would increase the overall storage requirements as the server and the client would both need to store the user identifier and the server would need to store the personal information. The duplicate information (i.e., the user identifier) would need to be stored at both the server and the client. Thus, this "freeing" up of space would actually increase overall storage requirements. Moreover, the Examiner has pointed to nothing in the prior art to support this motivation.

c. Hafner fails to disclose or suggest automatically combining multiple orders into a single order

Many of the claims are directed to automatically combining multiple orders placed with single-action ordering into a single order. For example, claim 126 recites, "the server computer automatically combines orders into a single order." It is the Examiner's position that "the combination of Joseph/Teper . . . does not specifically mention that the orders are combined. Hafner teaches a method and system for consolidating orders from multiple orders (col 8, lines 1-28 and col 10, lines 20-30)." (Office Action, Oct. 7, 2005, pp. 26-27.)

Hafner describes manually consolidating orders but does not disclose automatically combining multiple orders into a single order. Rather, Hafner discloses enabling a supplier and a retailer to manually review and change suggested orders at the supplier's server to consolidate orders. (Hafner, 6:67-7:4 and 8:19-23.) The suggested orders are generated by a replenishment system and communicated to the supplier's server. (Hafner, 6:17-29.) After receiving the suggested orders, the supplier either approves the suggested orders or changes the suggested orders to, for example, consolidate the orders. (Hafner, 6:29-32 and 8:19-23.) Although the supplier's server can automatically approve the suggested orders, the supplier or the retailer must manually change the suggested orders at the supplier's server to consolidate the orders. (Hafner, 5:56-60 and 6:74-7:1.) Accordingly, Hafner neither teaches nor suggests automatically combining multiple orders into a single order.

In addition, certain of these claims recite specific conditions under which orders are combined. For example, claim 127 recites that "the requested orders are combined when sent within a certain time interval," and claim 129 recites that "the requested orders are combined when the requested items have similar availability." The Examiner recognizes that the cited references do not mention these conditions for combining orders. The Examiner, however, inexplicably relies on applicants' own disclosure of the invention to reject these claims. (Office Action, Oct. 7, 2005, p. 27.) In describing the invention, applicants mention that "[o]ne skilled in the art would appreciate that the single-action orders can be combined in various ways based on other factors." (Specification, 12:9-10.) This statement means that upon reading applicants' disclosure of the invention one skilled in the art would appreciate that single-action orders can be combined in various ways. The Examiner is impermissibly using applicants' own disclosure to reject these claims.

3. Response to the Section 103(a) Rejection of Claims 108-117, 151-156, and 176-183 Over Joseph, Teper, and Official Notice

Claims 108-117, 151-156, and 176-183 were rejected under 35 U.S.C. § 103(a) over Joseph, Teper, and Official Notice. For the reasons described below, the Examiner has failed to establish that these claims are obvious over Joseph, Teper, and Official Notice. Therefore, the Section 103(a) rejection of these claims should be reversed.

a. Claims 108-117, 151-155, and 176-183

Claims 108-117, 151-155, and 176-183 are directed to not requiring a user to log in when ordering an item, but requiring a user to log in when changing account information. For example, claim 108 recites, "in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier . . . wherein the user does not need to log in to the server system when ordering the item" and "when account information is to be changed, coordinating the log in of the user to the server system; receiving updated account information; and sending the updated account information to the server system." As discussed above in

Section 2.a, Joseph and Teper fail to disclose or suggest this feature. Therefore, the Section 103(a) rejection of these claims should be reversed.

These claims are also directed to receiving a client identifier from a server system, storing the client identifier, and, in response to a single action being performed, sending the client identifier along with a request to order an item to the server system. For example, claim 108 recites, "receiving from a server system a client identifier of the client system; persistently storing the client identifier at the client system" and "when an item is to be ordered, . . . in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier." As discussed above in Section 2.b, Joseph and Teper fail to disclose or suggest this feature. Therefore, the Section 103(a) rejection of these claims should be reversed.

b. Claim 156

Claim 156 incorporates the language of its base claim 151 and further recites combining "multiple requests to order items into a single order." Although the quoted language does not explicitly recite "combin[ing] orders" as does claim 126, this claim depends from claim 151, which recites, "a single action that is to be performed to order the identified item." Therefore, it is evident that a single action places an order, and, when multiple single actions are performed, multiple orders are combined.

The Examiner relies on the shopping cart of Joseph as showing combining multiple requests into a single order. The placing of an item in a shopping cart is not, however, a request "to order the identified item" as recited by claim 156. Rather, it is a request to save an indication of the item so that the item along with other items in the shopping cart can be ordered during the checkout process. The checkout process of a shopping cart places a single order for multiple items that have not yet been ordered. Thus, there is only one request to order items, and not multiple requests to order that are combined. Therefore, the Section 103(a) rejection of this claim should be reversed for the same reasons as its base claim and this additional reason.

4. Response to the Section 103(a) Rejection of Claims 118-123, 126-137, and 159-163 Over Joseph, Teper, Hafner, and Official Notice

Claims 118-123, 126-137, and 159-163 were rejected under 35 U.S.C. § 103(a) over Joseph, Teper, Hafner, and Official Notice. For the reasons described below, the Examiner has failed to establish that these claims are obvious over Joseph, Teper, Hafner, and Official Notice. Therefore, the rejection of these claims should be reversed.

a. Claim 118

Claim 118 incorporates the language of its base claim 108 and is further directed to combining "multiple requests to order items into a single order." Although the quoted language does not explicitly state "combin[ing] orders" as does claim 126 (discussed above with reference to Section 2.c), claim 118 depends from claim 108, which recites, "in response to the single action being performed, sending to the server system a request to order the identified item." Therefore, it is evident that a single action places an order, and when multiple single actions are performed, multiple orders are combined into a single order. As discussed above in Section 2.c, Hafner fails to disclose or suggest this feature. Therefore, the Section 103(a) rejection of claim 118 should be reversed for the same reasons as its base claim and this additional reason.

b. Claims 119-120

Claims 119-120 incorporate the language of their base claim 108 and intervening claim 118 and are further directed to combining orders when the order requests are "sent within a certain time interval" or "sent within 90 minutes." As discussed above in Section 2.c, the Examiner impermissibly relies on the teachings of applicants' own disclosure in rejecting these claims. Accordingly, this rejection should be reversed for the same reasons as the base and intervening claims and this additional reason.

c. Claims 121-123

Claims 121-123 incorporate the language of their base claim 108 and are further directed to including "the identified item in an order with another item with similar availability." As discussed above in Section 2.c, the Examiner impermissibly relies on the

teachings of applicants' own disclosure in rejecting these claims. Accordingly, this rejection should be reversed for the same reasons as the base claim and this additional reason.

d. Claims 126 and 132-137

Claims 126 and 132-137 are directed to combining multiple orders into a single order. For example, claim 126 recites, "wherein the server computer automatically combines orders into a single order." As discussed above in Section 2.c, Hafner fails to disclose or suggest this feature. Therefore, the rejection of these claims should be reversed.

These claims are also directed to receiving a client identifier from a server system, storing the client identifier, and, in response to a single action being performed, sending the client identifier along with a request to order an item to the server system. Claim 126 recites, "receiving from a server system a client identifier of the client system; persistently storing the client identifier at the client system" and "in response to the single action being performed, sending to the server system a request to order the identified item and the client identifier." As discussed above in Section 2.b, Joseph and Teper fail to disclose or suggest this feature. Hafner also fails to disclose or suggest this feature. Therefore, the Section 103(a) rejection of these claims should be reversed.

e. Claims 127-128

Claims 127-128 incorporate the language of their base claim 126 and are further directed to combining orders when the order requests are "sent within a certain time interval" or "requested within 90 minutes." As discussed above in Section 2.c, the Examiner impermissibly relies on the teachings of applicants' own disclosure in rejecting these claims. Accordingly, this rejection should be reversed for the same reasons as the base claim and this additional reason.

f. Claims 129-131

Claims 129-131 incorporate the language of their base claim 126 and are further directed to combining orders "when the requested items have similar availability." As

discussed above in Section 2.c, the Examiner impermissibly relies on the teachings of applicants' own disclosure in rejecting these claims. Accordingly, this rejection should be reversed for the same reasons as the base claim and this additional reason.

g. Claims 159-160

Claims 159-160 are directed to combining multiple requested orders into a single order. Claim 159 recites, "wherein the requested orders are combined into a single order when received within a certain time interval," and claim 160 recites, "wherein the requested orders are combined into a single order when received within 90 minutes." As discussed above in Section 2.c, Hafner fails to disclose or suggest this feature. Moreover, as also discussed in Section 2.c, the Examiner impermissibly relies on the teachings of applicants' own disclosure in rejecting these claims. Therefore, the rejection of these claims should be reversed.

These claims are also directed to receiving a client identifier from a server system, storing the client identifier, and, in response to a single action being performed, sending the client identifier along with a request to order an item to the server system. Claim 158, from which these claims depend, recites, "providing to a client system a client identifier for the client system, the client identifier being associated with account information of a user and for persistent storage at the client system" and "receiving from the client system a request to order the identified item, the request including the client identifier." As discussed above in Section 2.b, Joseph and Teper fail to disclose or suggest this feature. Therefore, the rejection of these claims should be reversed.

h. Claims 161-163

Claims 161-163 are directed to combining multiple requested orders into a single order. Claim 161 recites, "wherein the requested orders are combined into a single order when the requested items have similar availability." As discussed above in Section 2.c, Hafner fails to disclose or suggest this feature. Moreover, as also discussed in Section 2.c, the Examiner impermissibly relies on the teachings of applicants' own disclosure in rejecting these claims. Therefore, the rejection of these claims should be reversed.

These claims are also directed to receiving a client identifier from a server system, storing the client identifier, and, in response to a single action being performed, sending the client identifier along with a request to order an item to the server system. Claim 158, from which these claims depend, recites, "providing to a client system a client identifier for the client system, the client identifier being associated with account information of a user and for persistent storage at the client system" and "receiving from the client system a request to order the identified item, the request including the client identifier." As discussed above in Section 2.b, Joseph and Teper fail to disclose or suggest this feature. Therefore, the Section 103(a) rejection of these claims should be reversed.

#### VIII. CONCLUSION

The Examiner's Section 103(a) rejection should be reversed primarily because the relied-upon art does not establish that the following claimed features are obvious: (1) not requiring a user to log in when ordering an item, but requiring a user to log in when changing account information, and (2) automatically combining multiple orders into a single order. The Examiner's obviousness-type double patenting rejection should be reversed primarily because Hafner does not suggest automatically combining orders and several of the claims have differences from the relied-upon art that the Examiner did not even address in rejecting the claims.

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Respectfully submitted,

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## APPENDIX A

### CLAIMS

108. A method in a client system for ordering an item, the method comprising:  
receiving from a server system a client identifier of the client system;  
persistently storing the client identifier at the client system;  
when an item is to be ordered,  
displaying information identifying the item and displaying an indication of a single action that is to be performed to order the identified item; and  
in response to the single action being performed, sending to the server system a request to order the identified item along with the client identifier, the client identifier identifying account information previously supplied by a user of the client system wherein the user does not need to log in to the server system when ordering the item;  
and  
when account information is to be changed,  
coordinating the log in of the user to the server system;  
receiving updated account information; and  
sending the updated account information to the server system  
whereby the user does not need to log in to the server system when ordering the item, but needs to log in to the server system when changing previously supplied account information.
109. The method of claim 108 wherein the account information includes billing information.
110. The method of claim 108 wherein the account information includes shipping information.

111. The method of claim 108 wherein the client system and server system communicate via the Internet.

112. The method of claim 108 including receiving from the server system a confirmation that the order was generated.

113. The method of claim 108 wherein the single action is clicking a mouse button when a cursor is positioned over a predefined area of the displayed information.

114. The method of claim 108 wherein the displaying includes displaying partial information supplied by the server system as to an identity of the user of the client system.

115. The method of claim 108 wherein the displaying includes displaying partial shipping information supplied by the server system.

116. The method of claim 108 wherein the displaying includes displaying partial payment information supplied by the server system.

117. The method of claim 108 wherein the item may alternatively be ordered using a shopping cart model.

118. The method of claim 108 wherein the server system combines multiple requests to order items into a single order.

119. The method of claim 118 wherein requests are combined when sent within a certain time interval.

120. The method of claim 118 wherein requests are combined when sent within 90 minutes.

121. The method of claim 108 wherein after the server system receives the request, it includes the identified item in an order with another item with similar availability.

122. The method of claim 121 wherein availability is categorized as short-term or long-term.

123. The method of claim 121 wherein availability is categorized as short-term, intermediate-term, or long-term.

124. (NotAppealed)

125. (NotAppealed)

126. A method in a client system for ordering items, the method comprising:  
receiving from a server system a client identifier of the client system;  
persistently storing the client identifier at the client system; and  
for each of a plurality of items

displaying information identifying the item and displaying an indication of a single action that is to be performed to order the identified item; and  
in response to the single action being performed, sending to the server system a request to order the identified item and the client identifier,  
the client identifier identifying account information of a user  
wherein the server computer automatically combines orders into a single order.

127. The method of claim 126 wherein the requested orders are combined when sent within a certain time interval.

128. The method of claim 126 wherein the requested orders are combined when requested within 90 minutes.

129. The method of claim 126 wherein the requested orders are combined when the requested items have similar availability.

130. The method of claim 129 wherein the availability is categorized as short-term or long-term.

131. The method of claim 129 wherein the availability is categorized as short-term, intermediate-term, or long-term.

132. The method of claim 126 wherein the client system and server system communicate via the Internet.

133. The method of claim 126 wherein the single action is clicking a mouse button when a cursor is positioned over a predefined area of the displayed information.

134. The method of claim 126 wherein the displaying includes displaying partial information supplied by the server system as to the identity of the user of the client system.

135. The method of claim 126 wherein the displaying includes displaying partial shipping information supplied by the server system.

136. The method of claim 126 wherein the displaying includes displaying partial payment information supplied by the server system.

137. The method of claim 126 wherein the item may alternatively be ordered using a shopping cart model.

138. (Not Appealed)

139. (NotAppealed)

140. (NotAppealed)

141. (NotAppealed)

142. (NotAppealed)

143. (NotAppealed)

144. (NotAppealed)

145. (NotAppealed)

146. (NotAppealed)

147. (NotAppealed)

148. (NotAppealed)

149. (NotAppealed)

150. (NotAppealed)

151. A client system for ordering an item, comprising:

a component that receives from a server system a client identifier of the client system and that stores the client identifier persistently;

a component that orders an item by displaying information identifying the item along with an indication of a single action that is to be performed to order the identified item and by sending to the server system a request to order

the identified item along with the client identifier, the client identifier identifying account information previously supplied by a user wherein the user does not need to log in to the server system when ordering the item; and

a component that updates account information by coordinating the log in of the user to the server system, receiving updated account information from the user, and sending the updated account information to the server system.

152. The computer system of claim 151 wherein the account information includes billing information.

153. The computer system of claim 151 wherein the account information includes shipping information.

154. The computer system of claim 151 wherein the single action is clicking a mouse button when a cursor is positioned over a predefined area of the displayed information.

155. The computer system of claim 151 including a component that alternatively orders the item using a shopping cart model.

156. The computer system of claim 151 wherein the server system combines multiple requests to order items into a single order.

157. (Not Appealed)

158. (Not Appealed)

159. The method of claim 158 wherein the requested orders are combined into a single order when received within a certain time interval.

160. The method of claim 158 wherein the requested orders are combined into a single order when received within 90 minutes.

161. The method of claim 158 wherein the requested orders are combined into a single order when the requested items have similar availability.

162. The method of claim 161 wherein the availability is categorized as short-term or long-term.

163. The method of claim 161 wherein the availability is categorized as short-term, intermediate-term, or long-term.

164. (Not Appealed)

165. (Not Appealed)

166. (Not Appealed)

167. (Not Appealed)

168. (Not Appealed)

169. (Not Appealed) .

170. (Not Appealed)

171. (Not Appealed)

172. (Not Appealed)

173. (NotAppealed)

174. (NotAppealed)

175. (NotAppealed)

176. A method in a computer for ordering an item, the method comprising:  
providing to a client system a client identifier for the client system, the client  
identifier being associated with account information of a user and for  
persistent storage at the client system;

when an item is to be ordered,

providing to the client system a display page identifying an item, the display  
page including an indication of a single action that is to be performed  
to order the identified item;

receiving from the client system an indication that the user performed the  
single action along with the client identifier; and

generating an order for the identified item using the account information  
associated with the received client identifier wherein the user does  
not need to log in to the computer system to order the item; and

when account information is to be changed,

coordinating the log in of the user to the computer system;

receiving from the client system updated account information; and

updating the account information associated with the client identifier of the  
logged in user based on the received updated account information.

177. The method of claim 176 wherein the account information includes billing  
information.

178. The method of claim 176 wherein the account information includes shipping  
information.

179. The method of claim 176 wherein the client system and server system communicate via the Internet.

180. The method of claim 176 wherein the single action is clicking a mouse button when a cursor is positioned over a predefined area of the displayed information.

181. The method of claim 176 wherein the display page includes partial shipping information supplied.

182. The method of claim 176 wherein the display page includes partial payment information supplied.

183. The method of claim 176 wherein the item may alternatively be ordered using a shopping cart model.

## **APPENDIX B**

No evidence pursuant to § 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

## **APPENDIX C**

A copy of the judicial proceedings identified above in Section II is attached hereto as Appendix C.

►  
Briefs and Other Related Documents

United States District Court, W.D. Washington.  
 AMAZON.COM, INC., Plaintiff,  
 v.  
 BARNESANDNOBLE.COM, INC., and  
 Barnesandnoble.Com, LLC, Defendants.  
 No. C99-1695P.

Dec. 1, 1999.

Online retailer brought action against competitor, alleging infringement of patent claiming a "one-click" method and system for placing a purchase order over the Internet. On retailer's motion for preliminary injunction, the District Court, Pechman, J., held that: (1) patent was not anticipated by prior art; (2) competitor was unlikely to rebut presumption of nonobviousness; (3) retailer showed likelihood of success on merits of its infringement claim; (4) retailer was entitled to presumption of irreparable harm and actually suffered irreparable injury; (5) balance of hardships weighed in favor of retailer; and (6) public interest would be served by injunction.

Granted.

West Headnotes

[1] Patents 291 ↗ 293.1

291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k293.1 k. In General. Most Cited Cases

To obtain a preliminary injunction under the patent statute, a party must establish a right thereto in light of four factors: (1) reasonable likelihood of success on the merits; (2) irreparable harm; (3) the balance of hardships tipping in its favor; and (4) the impact of the injunction on the public interest. 35 U.S.C.A. § 283.

[2] Patents 291 ↗ 312(1.2)

291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k312 Evidence

291k312(1) Presumptions and Burden of Proof

291k312(1.2) k. Patentability and Validity. Most Cited Cases

The statutory presumption of patent validity applies to all patents and is meant to contribute stability to the grant of patent rights; presumption operates at every stage of the litigation, including in a motion for preliminary injunction against an alleged infringer. 35 U.S.C.A. § 282.

[3] Patents 291 ↗ 312(1.2)

291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k312 Evidence

291k312(1) Presumptions and Burden of Proof

291k312(1.2) k. Patentability and Validity. Most Cited Cases

Defendant may overcome presumption of patent validity, for purpose of plaintiff's motion for preliminary injunction, if defendant raises a substantial question concerning the validity of a patent and if the party seeking the injunction fails to show that this defense lacks substantial merit.

[4] Patents 291 ↗ 72(1)

291 Patents

291II Patentability  
291III(D) Anticipation  
291k72 Identity of Invention  
291k72(1) k. In General. Most Cited Cases

Patents 291 ↗ 314(5)

291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k314 Hearing  
291k314(5) k. Questions of Law or Fact. Most Cited Cases

Anticipation of patent claims is a question of fact and is a defense only if all of the same elements are found in exactly the same situation and united in the same way in a single prior art reference.

[5] Patents 291 ↗ 66(1.24)

291 Patents

291II Patentability

291III(D) Anticipation

291k63 Prior Patents

291k66 Operation and Effect

291k66(1.24) k. Process, Method, and Apparatus Claims in General. Most Cited Cases

Patent claiming a “one-click” method and system for placing a purchase order over the Internet was not anticipated by prior art inventions which incorporated multiple-step or “shopping-cart” methods of online ordering.

[6] Patents 291 ↗ 66(1.24)

291 Patents

291II Patentability

291III(D) Anticipation

291k63 Prior Patents

291k66 Operation and Effect

291k66(1.24) k. Process, Method, and Apparatus Claims in General. Most Cited Cases

Patent claiming a “one-click” method and system for placing a purchase order over the Internet was not anticipated by prior art patent directed towards a service for controlling access to web documents within a particular domain, even if web pages were “items” to be ordered within meaning of patent for “one-click” method.

[7] Patents 291 ↗ 66(1.24)

291 Patents

291II Patentability

291III(D) Anticipation

291k63 Prior Patents

291k66 Operation and Effect

291k66(1.24) k. Process, Method, and Apparatus Claims in General. Most Cited Cases

Patent claiming a “one-click” method and system for placing a purchase order over the Internet was not anticipated by online service for obtaining stock charts, since service did not identify an item that a user could order with a single action and did not include a shopping cart component as required by the patent.

[8] Patents 291 ↗ 312(1.2)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k312 Evidence

291k312(1) Presumptions and Burden of Proof

Proof

291k312(1.2) k. Patentability and Validity. Most Cited Cases

Patents 291 ↗ 312(4)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k312 Evidence

291k312(3) Weight and Sufficiency

291k312(4) k. Degree of Proof; Prima Facie Case. Most Cited Cases

Included within presumption of validity mandated by patent statute is a presumption of nonobviousness which the patent challenger must overcome by proving facts with clear and convincing evidence; the presumption remains intact even upon proof of prior art not cited by the Patent and Trademark Office (PTO), though such art, if more relevant than that cited, may enable the challenger to sustain its burden. 35 U.S.C.A. § 282.

[9] Patents 291 ↗ 16(1)

291 Patents

291II Patentability

291II(A) Invention; Obviousness

291k16 Invention and Obviousness in General

291k16(1) k. In General. Most Cited Cases

Patents 291 ↗ 314(5)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k314 Hearing

291k314(5) k. Questions of Law or Fact.

Most Cited Cases

The issue of obviousness of a patent claim is a mixed question of fact and law; the ultimate question is one of law, but it is based on several factual inquiries, including (1) the scope and content of the prior art, (2) the differences between the prior art and the claims, (3) the level of ordinary skill in the pertinent art, and (4) applicable secondary considerations.

[10] Patents 291 ↗ 295

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. Most Cited Cases

Competitor was unlikely to succeed in showing that patent claiming a “one-click” method and system for placing a purchase order over the Internet was obvious, in order to rebut presumption of validity on patentee’s motion for preliminary injunction against competitor, notwithstanding expert testimony that prior art “shopping cart” system could have been easily modified to incorporate single-action ordering system, in view of evidence of long-felt need in the online retailing industry and copying of the invention by others. 35 U.S.C.A. § 103(a).

[11] Patents 291  97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Failure of inventor to disclose document as to which he was alleged contributor to Patent and Trademark Office (PTO) did not amount to inequitable conduct that would render patent unenforceable, in view of evidence that document was less relevant to patent than cited references, including one in a publication that itself referenced document at issue.

[12] Patents 291  98

291 Patents

291IV Applications and Proceedings Thereon

291k98 k. Requisites of Application in General. Most Cited Cases

A patentee need not cite an otherwise material reference to the Patent and Trademark Office (PTO) if that reference is merely cumulative or is less material than other references already before the examiner.

[13] Patents 291  167(1)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k167 Specifications, Drawings, and Models

291k167(1) k. In General. Most Cited Cases

Patent claims must be read in view of the specification of which they are a part, and words defined in the specification should be given the same meaning in the claims.

[14] Patents 291  101(2)

291 Patents

291IV Applications and Proceedings Thereon

291k101 Claims

291k101(2) k. Construction in General. Most Cited Cases

Term “shopping cart model,” in patent claiming a “one-click” method and system for placing a purchase order over the Internet, meant a method for on-line ordering in which a user selects and accumulates items to be purchased while browsing a merchant’s site and then must proceed to one or more checkout or confirmation steps in order to complete the purchase.

[15] Patents 291  165(4)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(B) Limitation of Claims

291k165 Operation and Effect of Claims in General

291k165(4) k. Reading Limitations or Elements Into Claims, or Disregarding Limitations or Elements. Most Cited Cases

A patent claim interpretation that excludes the preferred embodiment is rarely, if ever, correct.

[16] Patents 291  157(2)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(A) In General

291k157 General Rules of Construction

291k157(2) k. Construction to Give Validity and Effect to Patent. Most Cited Cases

When patent claims are amenable to more than one construction, they should when reasonably possible be interpreted so as to preserve their validity.

[17] Patents 291  101(2)

291 Patents

291IV Applications and Proceedings Thereon

291k101 Claims

291k101(2) k. Construction in General. Most Cited Cases

Terms “fulfill” and “order fulfillment component,” in patent claiming a “one-click” method and system for placing a purchase order over the Internet, referred to computerized, not physical, process.

[18] Patents 291 101(2)

291 Patents

- 291IV Applications and Proceedings Thereon  
291k101 Claims  
291k101(2) k. Construction in General. Most Cited Cases

Terms "single action" and "single-action ordering component," in patent claiming a "one-click" method and system for placing a purchase order over the Internet, referred to one action that a user would take to purchase an item once the following information was displayed to the user: (1) a description of the item, and (2) a description of the single action the user had to take to complete a purchase order for that item.

[19] Patents 291 298

291 Patents

- 291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k298 k. Establishment of Infringement. Most Cited Cases

Online retailer showed likelihood of success on merits of its claim that retailer's patent for "one-click" method and system for placing a purchase order over the Internet was infringed by competitor's similar system, as required for preliminary injunction.

[20] Patents 291 227

291 Patents

- 291XII Infringement  
291XII(A) What Constitutes Infringement  
291k227 k. Intent or Purpose, and Knowledge. Most Cited Cases

Where a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether he is infringing.

[21] Patents 291 300

291 Patents

- 291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k300 k. Irreparable or Comparative Injury. Most Cited Cases

Patentee was entitled to presumption of irreparable harm, for purpose of its motion for preliminary injunction against allegedly infringing conduct of

defendant, where patentee made strong showing that patent was valid and that defendants' accused feature infringed the patent, patentee established that defendants' asserted defenses lacked substantial merit, and defendant made no showing that allegedly infringing activities had ended or would soon end, that patentee engaged in a pattern of granting licenses, or that patentee unduly delayed in bringing suit.

[22] Injunction 212 14

212 Injunction

- 212I Nature and Grounds in General  
212I(B) Grounds of Relief  
212k14 k. Irreparable Injury. Most Cited Cases

Irreparable harm can be shown, for purpose of preliminary injunction motion, by demonstrating that damages are an inadequate remedy.

[23] Patents 291 300

291 Patents

- 291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k300 k. Irreparable or Comparative Injury. Most Cited Cases

Fact that parties were direct competitors trying to influence same group of customers, that plaintiff patentee had spent significant time and effort on market development, that defendants' continuing infringement was likely to undermine patentee's market position, and that defendants' unchecked infringement would encourage others to infringe supported finding of irreparable harm, for purpose of patentee's preliminary injunction motion in patent infringement suit.

[24] Patents 291 300

291 Patents

- 291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k300 k. Irreparable or Comparative Injury. Most Cited Cases

Where presumption of irreparable harm applies, that plaintiff's injuries are fully compensable cannot alone justify a finding that defendants rebutted the presumption of irreparable harm, for purpose of preliminary injunction motion in a patent infringement suit.

[25] Patents 291  300

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k300 k. Irreparable or Comparative Injury. Most Cited Cases

Balance of hardships between the parties favored granting of online retailer's motion for preliminary injunction against competitor's infringement of retailer's patented "one-click" ordering system, as any harm suffered by competitor would result directly from its misappropriation of retailer's patented purchasing method, competitor could modify infringing feature with relative ease, and, without injunction, retailer would lose primary value of patented feature, namely, its role in distinguishing the retailer's Internet site from site of a key competitor.

[26] Patents 291  300

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k300 k. Irreparable or Comparative Injury. Most Cited Cases

The balance of hardships does not favor a defendant, on a motion for preliminary injunction in a patent infringement suit, where the defendant took a calculated risk that it might infringe plaintiff's patents.

[27] Patents 291  301(5)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k301 Grounds for Denial in General

291k301(5) k. Injury or Inconvenience to Public. Most Cited Cases

Preliminary injunction preventing competitor from infringing online retailer's patented "one-click" ordering system would serve the public interest by fostering innovation in electronic commerce and enforcing intellectual property rights.

Patents 291  328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited Cases

5,708,780. Cited as prior art.

Patents 291  328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited Cases

5,960,411. Cited.

\*1230 David J. Burman, Jerry A. Riedinger, Brian G. Bodine, Perkins Coie, Seattle, WA, Lynn H. Pasahow, J. David Hadden, McCutchen Doyle Brown & Enersen, Palo Alto, CA, Christopher B. Hockett, McCutchen Doyle Brown & Enersen, San Francisco, CA, for plaintiff.

Warren Joseph Rheume, Koren Koubourlis, Foster Pepper & Shefelman, Seattle, WA, Steven I. Wallach, Jonathan A. Marshall, Ronald M. Daignault, Steven D. Chin, Thomas A. Canova, Bruce J. Barker, Garland T. Stephens, Kelly D. Talcott, John J. Lauter, Jr., William G. Pecau, Andrews Sanders, Pennie & Edmonds, New York City, for defendants.

**\*1231 ORDER ON PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION**

PECHMAN, District Judge.

**I. INTRODUCTION**

On October 21, 1999, Plaintiff Amazon.com filed a complaint in this Court alleging patent infringement by Defendants Barnesandnoble.com Inc. and Barnesandnoble.com LLC (hereinafter referred to collectively as "Barnesandnoble.com"). The patent in question is United States Patent No. 5,960,411 (the '411 patent), which was issued on September 28, 1999. The '411 patent describes a Method and System for Placing a Purchase Order Via a Communications Network and includes 26 claims.

The '411 patent, in essence, describes a method and system in which a consumer can complete a purchase order for an item via the Internet using only a single action (such as a single click of a computer mouse button) once information identifying the item is displayed to the consumer. This method and system is only applicable in situations where a retailer already has in its files various information about the purchaser

(such as the purchaser's address and credit card number) and where the purchaser's client system (e.g., a personal computer) has been provided with an identifier that enables the retailer's server system to identify the purchaser.

Amazon.com alleges that Defendants' "Express Lane" ordering feature infringes various claims of the '411 patent. Concurrently with its complaint, Amazon.com filed a motion for a preliminary injunction to enjoin Barnesandnoble.com from infringing the '411 patent. Amazon.com properly noted a hearing on the motion for a preliminary injunction in accordance with the local rules of this Court for November 12, 1999. After the Court denied Defendants' motion to reschedule the hearing to January of 2000, the parties fully briefed their arguments and conducted expedited discovery, including a number of depositions. An evidentiary hearing on Plaintiff's motion began on November 16, 1999, and was conducted over five days.

Amazon.com presented live testimony at the hearing from the following witnesses: Mr. Henry Manbeck, an attorney and former Commissioner of Patents and Trademarks; Mr. Jeffrey Bezos, the chairman and chief executive officer of Amazon.com; and Mr. Geoffrey Mulligan, who was presented as an expert on electronic commerce ("e-commerce"). Barnesandnoble.com presented live testimony at the hearing from the following witnesses: Dr. John Lockwood, an assistant professor of computer science at Washington University in St. Louis and the developer of a program called Web Basket; Mr. Alexander Trevor, a technology consultant and a former employee of CompuServe, Inc.; Mr. Gary King, the chief information officer for Barnesandnoble.com; and Mr. Jonathan Bulkeley, the chief executive officer of Barnesandnoble.com. In addition, the parties jointly submitted deposition designations from the following individuals: Mr. Shel Kaphan, who is listed as an inventor of the '411 patent; Dr. Eric Johnson, a professor at the Columbia School of Business who was presented as an expert on e-commerce issues; Mr. Martin Adelman, a professor at the George Washington University School of Law; and Mr. Donald Carli, the founder and principal of Nima Hunter, Inc., which provides services related to e-commerce.

Defendants raised a number of defenses in their pleadings and during the hearing. In support of their position that Amazon.com is not likely to succeed at a trial on the merits, Defendants placed particular emphasis on arguments that the '411 patent is invalid

on obviousness and anticipation grounds and that the Express Lane feature does not infringe any claims in the '411 patent. To a lesser extent, Defendants also suggested that the '411 patent is unenforceable. In addition, Defendants argued that Amazon.com could not demonstrate irreparable harm, that the balance \*1232 of hardships did not tip in Amazon.com's favor, and that the public interest would not be served by issuance of a preliminary injunction.

On November 22, 1999, following the testimony of all witnesses and the submission of evidence, the parties presented proposed findings of fact and conclusions of law to the Court. The Court heard closing arguments on November 23, 1999. Based on the papers, pleadings, testimony, evidence, and arguments presented by the parties, the Court finds that Plaintiff has demonstrated: (1) a reasonable likelihood of success on the merits at trial; (2) it will suffer irreparable harm if the preliminary injunction is not granted; (3) the balance of hardships tips in its favor; and (4) the preliminary injunction sought is in the public interest. Although Defendants have raised a number of defenses concerning the validity of the patent and infringement of the patent, Plaintiff has shown that the defenses asserted by Defendant lack substantial merit. Therefore, the Court hereby GRANTS Plaintiff's motion for a preliminary injunction.

The Preliminary Injunction is effective at 12:01 a.m. P.S.T. on Saturday, December 4, 1999, and upon Amazon.com's filing an undertaking in the sum of \$10,000,000, and shall remain in effect during the pendency of this action. Defendants may, however, continue to offer an Express Lane feature if the feature is modified in a manner that is consistent with this Order to avoid infringement of the '411 patent.

Pursuant to Fed.R.Civ.P. 52(a), the Court's findings of facts and conclusions of law are set forth below.

## II. FINDINGS OF FACT

### *Background*

I. Plaintiff Amazon.com, Inc. ("Amazon.com") is a Delaware corporation with its principal place of business at Seattle, Washington. Through its website, [www.amazon.com](http://www.amazon.com), the company enables customers to find and purchase books, music, videos, consumer electronics, games, toys, gifts, electronic greeting cards, and other items over the World Wide Web. (Ex.

11, Bezos Decl. ¶ 3). Amazon.com is the leading online retailer of books. (Ex. A-18 at 19, ¶ 2).

2. Defendant Barnesandnoble.com LLC is a Delaware limited liability company with its principal place of business at New York, New York. Barnesandnoble.com LLC operates a website through which it distributes books, software, music, and other items. (Ex. 36 at 6).

3. Defendant Barnesandnoble.com Inc. is a Delaware corporation with its principal place of business at New York, New York. Barnesandnoble.com Inc. is a holding company whose sole asset is a 20% share in Barnesandnoble.com LLC, and whose business is acting as sole manager of Barnesandnoble.com LLC. Barnesandnoble.com Inc. controls all major business decisions of Barnesandnoble.com LLC. Collectively, these two defendants are referred to herein as "Barnesandnoble.com." (Ex. 36).

4. Sometime before May 1997, Amazon.com CEO Jeffrey Bezos conceived of an idea to enable Amazon.com customers to purchase items with a single-click of a computer mouse button. (Tr. at 123:4-22, 124:1-12 (Bezos)). This idea was commercially implemented by Amazon.com in September of 1997. (Tr. at 125:9-13 (Bezos)).

5. On September 28, 1999, United States Patent No. 5,960,411 (the "411 patent"), entitled "Method and System for Placing a Purchase Order Via a Communications Network," was issued. (Complaint, Ex. A). The filing date for the 411 patent is September 21, 1997. (*Id.*) The patent was assigned to and is owned by Amazon.com.

6. The evidence indicates that before granting the patent, the examiner assigned to the patent searched the data base of patents available at the Patent and Trademark Office (PTO), and obtained a search of private databases through the PTO's Science and Technology Information Center ("STIC"). Additionally, the examiner \*1233 commissioned a third-party search firm to perform a search for potential non-patent prior art. (Tr. at 62:20-25 (Manbeck); Ex. 13, Manbeck Decl. at ¶¶ 8, 9). The examiner also conferred with more senior examiners and counsel to insure that the patent involved patentable subject matter. (Tr. at 60:16-63:14; 65:2-10; 72:20-73:9 (Manbeck); Ex. 13, Manbeck Decl. at ¶ 10). The evidence from the patent's file history and the testimony of former Commissioner Manbeck indicates that the patent was thoroughly examined by the PTO before issuance. (Tr. at

73:10-13 (Manbeck); Ex. 13, Manbeck Decl. at ¶ 11).

#### Prior Art

7. Plaintiff's expert Geoffrey Mulligan testified that except for single-action ordering and the implementation of single-action ordering without a shopping cart model, everything in the independent claims of the 411 patent (claims 1, 6, 9, and 11) is in prior art. (Tr. at 180:14-181:3).

8. In support of their arguments that the single-action ordering element of the 411 patent is invalid on obviousness and anticipation grounds, Defendants offered evidence concerning several prior art references. This evidence of prior art falls into two general categories: systems for ordering tangible items online (such as groceries or computer equipment) and electronic document delivery systems. In the former category were Dr. John Lockwood's Web Basket system, the Netscape Merchant System described in the "Creating a Virtual Store" reference, and the "Oliver's Market" web pages. In the latter category were the CompuServe financial information service represented by Mr. Alexander Trevor's testimony regarding the "Trend" feature, and U.S. Patent No. 5,708,780 (the '780 patent). It is undisputed that these prior art references were not before the PTO when the 411 patent was examined.

#### Web Basket

9. Defendants presented evidence regarding an on-line ordering system called "Web Basket" that was developed in and around August 1996 by Defendants' expert Dr. John Lockwood. (Tr. at 214:23-216:2; 218:13-229:18 (Lockwood); Ex. A-56, Lockwood Decl. ¶ 9). Defendants argue that Web Basket anticipates at least claims 6-8 of the 411 patent and that this reference, either alone or in combination with other prior art references, renders the claims of the 411 patent obvious.

10. Web Basket requires users to accumulate items into a virtual shopping basket and to check these items out when they are finished shopping. (Tr. at 175:6-17; 176:7-179:13 (Mulligan); Ex. 12, Mulligan Supp. Decl. at ¶ 29). Web Basket also requires several confirmation steps for even preregistered users to complete their purchases. (Ex. 12, Mulligan Supp. Decl. at ¶¶ 18-22; Ex. A-56, Lockwood Decl. ¶¶ 41-44).

11. The Court finds that Web Basket requires a multiple-step ordering process from the time that an item to be purchased is displayed. (*See* Tr. at 275:7-276:5). These multiple steps are inconsistent with the single-action requirements of the '411 patent.

12. On cross-examination, Dr. Lockwood admitted that it "could have" been simpler for a person purchasing from Web Basket to purchase items using only one click of a computer mouse, but he admitted that he never considered making single-action ordering an available option to users. (Tr. at 277:19-23 (Lockwood)).

#### *Netscape Merchant System*

13. Defendants also presented as a prior art reference an excerpt from a book entitled "Creating the Virtual Store" that was copyrighted in 1996. (Ex. A-63; Ex. 27). Defendants focused on the following language from this reference: "Merchants also can provide shoppers with an instant buy button for some or all items, enabling them to skip check out review. This provides added appeal for customers who already know the single item they want to purchase during their shopping excursion." (Ex. 27 at 7; Tr. at 309:23-310:18; 312:3-\*1234 20 (Lockwood)). Defendants argue that the Netscape Merchant System reference anticipates each of the independent claims of the '411 patent and that this reference, either alone or in combination with other prior art references, renders the claims of the '411 patent obvious.

14. The balance of the Netscape article describes a multi-step shopping cart ordering model that requires both checkout and checkout review steps. (Ex. 27). A first step is required to put an item in the user's cart. Information identifying the item is then stored on the user's computer. A second "check-out" step is required to send that information to the merchant's computer. A third step of checkout review must occur after the transfer of the list of purchased items to the merchant's computer during the check-out step. The standard Netscape shopping cart therefore would appear to require a minimum of three steps by the user. (Tr. at 324:12-327:18 (Lockwood)).

15. Read in context, the few lines relied on by Defendants appear to describe only the elimination of the checkout review step, leaving at least two other required steps to complete a purchase. (Tr. at 327:10-18 (Lockwood); *see also* Ex. 27 at 7). Thus, apart from the words "instant buy," there is no indication that the Netscape system implements a

single-action ordering component as required by claims 6 and 9 of the '411 patent or a single action as required by claims 1 and 11 of the '411 patent. Moreover, Defendants' expert acknowledged that he did not know how the Netscape instant buy feature worked. (Tr. at 312:3-20; 350:7-12 (Lockwood)).

#### *Oliver's Market*

16. Defendants presented pages from a website entitled "Oliver's Market The Ordering System." (Ex. A-106). This web site may be accessed at [www.sonic.net/raptor/current/how2ordr.html](http://www.sonic.net/raptor/current/how2ordr.html). Defendants contend that the Oliver's Market system anticipates all of the independent claims of the '411 patent and that this reference, either alone or in combination with other prior art references, renders the claims of the '411 patent obvious.

17. Though the Oliver's Market reference begins with the sentence: "A single click on its picture is all it takes to order an item," the ordering system described by the reference is a multi-step shopping cart model. (Ex. A-106).

18. The "single click" referred to in the first sentence is the click required to add an item to the user's shopping cart and does not complete the ordering process. After a single action is taken to select an item, the method described by this reference explicitly requires the user to take further actions to complete a purchase order, including: (1) specifying whether items will be picked up or delivered; (2) specifying the time that pickup or delivery is desired; and (3) indicating that the user is done shopping, which would appear to be the checkout procedure required by a standard shopping cart model. These additional actions are inconsistent with the single-action requirements of independent claims 1, 6, 9, and 11.

#### '780 patent

19. Defendants also presented testimony by Dr. Lockwood in support of their argument that U.S. Patent No. 5,708,780 (the '780 patent) anticipates or renders obvious claims of the '411 patent. The '780 Patent lists a filing date of June 7, 1995 and an issue date of January 13, 1998. (Ex. A-67). The title of the '780 patent is "Internet Server Access Control and Monitoring System." The description of the '780 patent is directed towards a service for controlling access to web documents within a particular domain. Defendants argue that the '780 patent anticipates

claims 1 and 11 of the '411 patent.

20. In the '780 patent's preferred embodiment, a user browses the web conventionally. (Ex. A-67 at Col. 3, ll 21-22). A content server provides web documents to the user and determines when the user seeks access to "controlled" content, i.e., web pages for which the user needs authorization\*1235 to browse. (*Id.* at Col. 3, ll 22-25; Fig. 2A).

21. The '780 patent does not explicitly show generating an order for an item. The record regarding whether and how the system of the '780 patent generates an order for an item consists entirely of Dr. Lockwood's testimony. Dr. Lockwood's testimony on this point is confusing and the witness appeared not to understand how the system described would function. Dr. Lockwood testified that generating an order takes place when the server system opens a file on its disk drive to read a controlled page. (Tr. at 305:1-19). Dr. Lockwood also testified that the user places an order by selecting a link to a controlled page. (Tr. at 302:5-303:5).

22. The testimony of Dr. Lockwood regarding this patent, as well as the '780 patent itself, describe a system in which controlled pages are simply returned to the user's browser when an authorized request is received by the content server. (See Ex. A-67, fig. 3; Tr. at 309:2-16).

23. It appears that if billing is to take place at all in the '780 Patent system it would take place based on the logged transactions. (Tr. 306:9-15). In this regard, the '780 Patent system shows no more than a method for tracking what documents the users of an on-line information service like LEXIS or WESTLAW would request and then billing them based on these requests.

#### *CompuServe Trend System*

24. Defendants presented evidence that CompuServe offered a service called "Trend" beginning in the mid-1990s whereby CompuServe subscribers could obtain stock charts for an additional surcharge. Defendants presented screen shots from the current system and the testimony of a former CompuServe employee that the current screen shots were substantially the same as those provided to CompuServe subscribers in the mid 1990s. (Tr. at 369:12-20 (Trevor)). Defendants argue that the Trend System anticipates claim 11 of the '411 patent and renders obvious various claims of the patent.

25. The CompuServe system was not a world wide web application. (Tr. at 380:21-381:7 (Trevor)). Instead, after a user logged in, a persistent connection was established between the user's computer and CompuServe which lasted until the user logged off. (Tr. at 368:24-369:8; 380:25-381:16 (Trevor)). CompuServe, therefore, did not solve the problem of identifying users.

26. To order a chart from CompuServe, the user must first log in to the CompuServe service with his or her user ID and password, then select the Trend application dialogue box. Once that box appears, the user at a minimum must first (1) type in a stock ticker tape symbol and then (2) click on the chart button which becomes active once the user has typed the first letter of the ticker tape symbol. (Tr. at 377:25-378:18; 388:4-14 (Trevor)). The Court finds that this method involves two actions, not one. In addition, CompuServe does not begin processing any surcharge to the user's account until the user's computer performs an additional step of sending back a confirmation to CompuServe that the requested chart image was in fact accessed. (Tr. at 384:5-14 (Trevor)).

#### *Summary of Prior Art*

27. There are key differences between each of the prior art references cited by Defendants and the method and system described in the claims of the '411 patent. The Court finds that none of the prior art references offered by Defendants anticipate the claims of the '411 patent. On the question of obviousness, the Court finds that the differences between the prior art references submitted by Defendants and the '411 patent claims are significant. Moreover, there is insufficient evidence in the record regarding a teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art of e-commerce to combine the references. The Court finds particularly telling Dr. Lockwood's admission that it never occurred to him to modify his Web Basket program to enable single-action ordering, \*1236 despite his testimony that such a modification would be easy to implement. This admission serves to negate Dr. Lockwood's conclusory statements that prior art references teach to one of ordinary skill in the art the invention of the '411 patent. (Tr. at 319:5-320:22 (Lockwood)).

#### *Barnesandnoble.com's Shopping Cart and Express Lane*

28. Barnesandnoble.com offers customers two purchasing options. One is called Shopping Cart and the other is called Express Lane. (Ex. 9, Mulligan Decl. at ¶¶ 7, 8.i, Ex. H). The two methods are separate and cannot be combined. (Tr. at 429:6-10 (King); Ex. 9, Mulligan Decl. at Ex. I (noting "Express Lane and the Shopping Cart are two different ways to place your order. You can't combine them")). The Barnesandnoble.com Shopping Cart option includes the steps of a standard shopping cart model, including adding items to a virtual shopping cart and "checking out" to complete the purchase. (Ex. 9, Mulligan Decl. at ¶ 14j).

29. Barnesandnoble.com's Express Lane allows customers who have registered for the feature to purchase items by simply clicking on the Express Lane button shown on the detail or product page that describes and identifies the book or other item to be purchased. (Ex. 9, Mulligan Decl. at Ex. R). The text beneath the Express Lane button invites the user to "Buy it now with just 1 click!" (*Id.*).

30. Throughout its web site, Barnesandnoble.com consistently describes Express Lane as a one-click ordering method. (Tr. at 463:15-464:10 (Bulkeley)). In its May 1999 prospectus, Barnesandnoble.com consistently described Express Lane as making one-click ordering possible. (*See, e.g.*, Ex. 36 at 6, 44, 47). In its November 1999 10-Q Report to shareholders, Barnesandnoble.com describes Express Lane as a one-click ordering system. (Ex. 39 at 13). It does not appear that Barnesandnoble.com has ever described the Express Lane ordering process as requiring more than one action, other than in the course of this litigation. (Tr. 471:1-4 (Bulkeley)).

31. Barnesandnoble.com began using the Express Lane feature in May of 1998, describing the feature in a press release as "Express Lane (SM) One Click Ordering" and noting that "[n]ow, visitors can click one button to order books, software and magazines." (Ex. 37).

32. Clicking on the shopping cart icon on the top of every Barnesandnoble.com page will not show the items that the user has purchased using the Express Lane. (Tr. at 430:14-17 (King)).

33. The strong similarities between the Amazon.com 1-click feature and the Express Lane feature subsequently adopted by Barnesandnoble.com suggest that Barnesandnoble.com copied Amazon.com's feature. (Ex. 10, Johnson Decl., ¶ 13).

#### *Direct Evidence of Nonobviousness*

34. Amazon.com has provided direct evidence of nonobviousness. Jeff Bezos, Amazon.com's founder and an inventor on the '411 patent, testified that because "many customers were tentative and somewhat fearful of on-line purchasing, conventional wisdom was that they had to be slowly and incrementally led to the point of purchase. In addition, consumers were not acclimated to rely without confirmation on stored personal information for correct shipping and billing." (Ex. 11, Bezos Decl. ¶ 9).

35. Professor Eric Johnson of Columbia Business School testified in his declaration that "Amazon.com's 1-Click ® purchasing was a major innovation in on-line retailing that allows for purchasing without disrupting the consumer's shopping experience; and by eliminating additional confirmation requirements, recasts the default in a way that both maximizes the likelihood that consumers will complete their purchases and minimizes consumer anxiety over real or perceived issues of internet security." (Ex. 10, Johnson Decl. ¶ 12).

36. Moreover, despite their experience with prior art shopping cart models of on-line purchasing, both sides' technical experts<sup>\*1237</sup> acknowledged that they had never conceived of the invention. Mr. Mulligan testified that ordering with one click was "a huge leap from what was done in the past." (Tr. at 190:25). Mr. Mulligan testified further that: "I've been working in electronic commerce for years now. And I've never thought of the idea of being able to turn a shopping cart or take the idea of clicking on an item and suddenly having the item ship- having the complete process done." (Tr. at 199:3-7). Mr. Mulligan also testified that he believed it was "a huge leap of faith for the website and the consumer to implement something like this." (Tr. at 199:12-14). Additionally, as noted above, Dr. Lockwood testified that he never thought of modifying Web Basket to provide single-action ordering. (Tr. at 277:19-23).

#### *Objective Factors*

37. Plaintiff's single-action ordering method addressed an unsolved need that had been long-felt (at least in the relatively short period of time that e-commerce has existed), namely streamlining the on-line ordering process to reduce the high percentage of orders that

are begun but never completed, *i.e.*, abandoned shopping carts. The problem of on-line consumers starting but abandoning shopping carts was acknowledged by both parties and their experts. (Ex. 10, Johnson Decl. ¶ 8; Ex. 11, Bezos Decl. ¶ 8; Tr. at 473:14-474:5; (Bulkeley); Tr. at 418:1-420:12 (King)).

38. In the on-line industry in general and at Barnesandnoble.com in particular, over half of the shopping carts started by customers are abandoned before checkout. (Tr. at 418: 9-11 (King)). In an attempt to alleviate the problem of abandoned shopping carts, Barnesandnoble.com attempts to make the checkout process as simple and easy as possible. (Tr. at 473:24-474:5 (Bulkeley); Tr. at 419:24-420:8 (King)). The single-action ordering invention of the '411 patent solves the problem by eliminating the checkout process entirely.

39. Barnesandnoble.com presented evidence that a number of other e-commerce retailers have offered single-action ordering to customers. (Tr. at 453:11-456:15 (Bulkeley)).

40. Amazon.com's single-action ordering is used by millions of customers, indicating the commercial success of the feature. (Ex. 11, Bezos Decl. ¶ 14). Barnesandnoble.com's Express Lane also accounts for a significant portion of its sales. (Ex. 28). Further evidence of commercial success of single-action ordering is suggested by the fact that Barnesandnoble.com promoted its Express Lane feature in a press release after it was announced (Ex. 37) and in its prospectus (Ex. 36 at 6, 44, and 47). Indeed, Barnesandnoble.com described Express Lane as one of its "major enhancements" to its on-line business. (*Id.* at 6).

41. Industry analysts and the popular press also found Amazon.com's single-action ordering process to be innovative. Patricia Seybold, an e-commerce observer and consultant, described Amazon.com's 1-Click ® purchasing as "legendary." (Ex. 11, Bezos Decl. ¶ 14; Ex. A). Joseph Gallivan in *The New York Post* described Amazon.com's 1-Click ® purchasing as a "seductive innovation." (Ex. 11, Bezos Decl. ¶ 14; Ex. B). *InfoWorld* indicated: "Net retailers are starting to realize that potential customers often don't make it as far as the virtual checkout line-they fill their on-line shopping carts with products, then simply abandon them.... Faced with these problems, it's no surprise that retailers have been eyeing Amazon.com's 1-click purchases with envy for some time now." (Ex. 11, Bezos Decl. ¶ 14).

### ***Irreparable Harm***

42. The harm that would be suffered by Amazon.com due to Barnesandnoble.com's infringement during the pendency of this case would be irreparable. The invention described in the '411 patent is of significant commercial value, as evidenced, among other things, by the large number of customers who make use of single-action ordering available on the websites of both Amazon.com and Barnesandnoble.com,\*1238 and by the large number of other e-commerce retailers whom Barnesandnoble.com claims have adopted single-action ordering. (Ex. 11, Bezos Decl. ¶ 14; Ex. 28; Tr. at 453:11-456:15 (Bulkeley)).

43. The harm Amazon.com would suffer if denied the benefit of using its invention to distinguish itself from its competitor Barnesandnoble.com could not easily be measured in dollars. (Tr. at 474:19-475:19 (Bulkeley)).

44. Amazon.com has pursued a strategy of innovating to distinguish its shopping experience from the competition, and it has made substantial investments to build customer relationships and broaden its customer base during the current growth phase of electronic commerce. (Tr. at 107:22-109:1 (Bezos); Ex. 10, Johnson Decl. ¶ 7).

45. Customers become loyal to sites with which they become familiar. Considerations such as ease of use and the availability of time-saving features are significant factors in determining the relative success of on-line enterprises. (Ex. 10, Johnson Decl. ¶ 4; Tr. at 122:4-11; 419:25 & 420:1-12). Creating easy-to-use and easy-to-learn consumer interfaces is a key aspect of e-commerce competition. Amazon.com's commercial success depends in part on its efforts to reduce its customers' time and effort in using its site. (Ex. 10, Johnson Decl. ¶ 7; *see also* Ex. 37, at 41).

46. One of Amazon.com's investments to improve its customers' experience and attract new customers was to develop single-action ordering. (Tr. at 123:4-124:6 (Bezos)). The feature has been popular with Amazon.com customers and the one-step ordering innovation has been praised in the industry. (Tr. at 125:9-126:6 (Bezos); Ex. 11, Bezos Decl. at ¶ 14, Exs. A, B).

47. A number of other e-commerce retailers, including Defendants, subsequently adopted systems that are

essentially identical to the features of Amazon.com's single-action ordering process. With respect to Barnesandnoble.com, the Court finds that its later adoption of a single-action ordering system, Express Lane, eliminated a key point of differentiation between its website and Amazon.com's.

48. The harm to Amazon.com would be compounded if Barnesandnoble.com's infringement were permitted to continue during the 1999 holiday shopping season. (Ex. 10, Johnson Decl. ¶ 16; Ex. 11, Bezos Decl. ¶ 20). There is no dispute that holiday seasons have historically been key periods for e-commerce customer acquisition and that they can have a significant effect on the long-term prospects of e-commerce businesses. (See Tr. at 474:9-18 (Bulkeley)). In 1998, for example, Amazon.com increased its customer base nearly 20% in just the last six weeks of the year, adding over a million new customer accounts in this time period. (Ex. 11, Bezos Decl. at ¶ 20). This year appears likely to be an even more significant season for customer acquisition. (Ex. 10 Johnson Decl. at ¶¶ 16-17; Ex. 11, Bezos Decl. at ¶ 20; Tr. at 108:3-16). Industry estimates for the amount that will be spent by consumers online in November and December of this year range from \$6 to 12 billion-2 to 3 times the amount spent during the same period in 1998. (Ex. 10; Johnson Decl. at ¶ 16, Exs. C, D)

49. As many as 10 million new users are expected to make their first on-line purchases during the 1999 holiday season. (Ex. 10; Johnson Decl. ¶ 16). Millions of these new customers are likely to be shopping at Amazon.com and Barnesandnoble.com for the first time. Long-term success in e-commerce depends on establishing positive relationships with these new on-line buyers now, to preserve the ability to compete effectively for future sales, which by some estimates will reach \$78 billion by the year 2003. (Ex. 10, Johnson Decl., Ex. C; Tr. at 474:9-18).

50. If Barnesandnoble.com were able to continue to offer Express Lane as currently configured during the 1999 holiday season and for the pendency of this action, Amazon.com would not be able to distinguish itself from a key competitor by offering\*1239 single-action ordering and would likely lose market share and customers to Barnesandnoble.com. The Court finds that this loss would not be easily compensable in damages. Exclusive rights to the patented invention are important to Amazon.com's ability to differentiate the customer experience available at its site from that of competitor sites such as Barnesandnoble.com.

### III. CONCLUSIONS OF LAW

1. This Court has subject matter jurisdiction over Amazon.com's claim for patent infringement pursuant to 28 U.S.C. §§ 1331 and 1338(a). Defendants are subject to personal jurisdiction in this District because they have purposefully availed themselves of the privileges of conducting business in the State of Washington.
2. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b) and 1400(b) because Defendants reside here (28 U.S.C. § 1391(c)).
3. On September 28, 1999, United States Patent No. 5,960,411 (the "'411 patent"), entitled "Method and System for Placing a Purchase Order Via a Communications Network," was duly and legally issued. The patent was assigned to and is owned by Amazon.com.

#### *Preliminary Injunction Standard*

[1] 4. "[T]o obtain a preliminary injunction, pursuant to 35 U.S.C. § 283, a party must establish a right thereto in light of four factors: (1) reasonable likelihood of success on the merits; (2) irreparable harm; (3) the balance of hardships tipping in its favor; and (4) the impact of the injunction on the public interest." *Hybritech, Inc. v. Abbott Labs.*, 849 F.2d 1446, 1451 (Fed.Cir.1988).

##### *A. Likelihood of Success on the Merits*

###### *Validity*

[2][3] 5. The statutory presumption of validity, 35 U.S.C. § 282, applies to all patents and is meant "to contribute stability to the grant of patent rights." *Magnivision, Inc. v. Bonneau Co.*, 115 F.3d 956, 958 (Fed.Cir.1997). This presumption operates at every stage of the litigation, including in a motion for preliminary injunction against an alleged infringer. See *Canon Computer Systems, Inc. v. Nu-Kote Int'l, Inc.*, 134 F.3d 1085, 1088 (Fed.Cir.1998). A defendant may overcome this presumption, however, if he raises a "substantial question" concerning the validity of a patent and if the party seeking the injunction fails to show that this defense lacks "substantial merit." See *New England Braiding Co. v.*

A.W. Chesterton Co., 970 F.2d 878, 883 (Fed.Cir.1992) (noting that “[w]hile it is not the patentee's burden to prove validity, the patentee must show that the alleged infringer's defense lacks substantial merit”). Defendants raise a number of questions regarding the '411 patent's validity, which the Court discusses below.

### *Anticipation*

[4][5] 6. Anticipation is a question of fact, *see Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1346 (Fed.Cir.1999), and is a defense only if “all of the same elements are found in exactly the same situation and united in the same way ... in a single prior art reference.” *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 894 (Fed.Cir.1984). Although anticipation is a factual inquiry, the Court reiterates its findings and the applicable law here for ease of reference.

7. The Court finds that Web Basket does not anticipate any claim of the '411 patent. Each claim of the '411 patent requires either “a single-action ordering component” [claims 1-10] or “a single action that is to be performed to order the identified item” [claims 11-26]. The Web Basket ordering process requires that the user perform at least five actions to complete the order. Web Basket, therefore, does not include “a single-action ordering component” or “a single action that is to be performed to order the identified item.”

8. In addition, claims 1-5 and 11-26 require that “the item is ordered without using a shopping cart ordering model” [claims 1-5] or “the item is ordered independently\*<sup>1240</sup> of a shopping cart model” [claims 11-26]. Because Web Basket is itself a shopping cart model, it lacks these required elements as well.

9. The description of the Netscape Instant Buy option presented by Defendants consisted of a total of four lines. Defendants' expert Dr. Lockwood was unable to supply any additional information regarding the feature described by this reference and ultimately admitted that he did not know how the feature worked. (Tr. at 312:3-20; 350:7-12). The Netscape reference therefore does not teach the invention to one of ordinary skill in the art (e.g., Dr. Lockwood) as is required of an anticipatory reference.

10. Moreover, when read in context, the reference appears to describe a shopping cart model with an option to skip one of the required checkout steps.

Thus viewed in the best light for Defendants, the Netscape reference fails to anticipate any of the claims of the '411 for the same reasons as Web Basket: it does not include a single-action ordering component. Moreover, it does not appear to be independent of a shopping cart model, as required by claims 1 and 11.

11. Similarly, the Oliver's Market reference, when read as a whole, plainly discloses a multi-step shopping cart model. It, therefore, also lacks the same elements that are missing from Web Basket and Netscape: a single-action ordering component that is independent of a shopping cart model.

[6] 12. The '780 patent entitled “Internet Server Access Control and Monitoring System” also fails to anticipate any claim of the '411 patent. As discussed above, the system described in the '780 patent controls access to certain web pages. Even assuming that a web page is an “item” to be ordered as that term is used in the claims of the '411 patent, the access control system described in the '780 patent is not an ordering system.

13. Each claim of the '411 patent requires that the server system generate an order for the item requested by the customer. The requirement is described in slightly different terms in each of the independent claims but the import is the same: “generat[e] an order to purchase the requested item” (claim 1); “locate additional information needed to complete the order and so that the server system can fulfill the generated order” (claim 6); “uses the retrieved information to place an order for the indicated user for the item”(claim 9); “whereby the item is ordered independently of a shopping cart model and the order is fulfilled to complete a purchase of the item” (claim 11).

14. The system described by the '780 patent merely delivers the requested web page to authorized users as would any other web server. The fact that the user may later be billed based on a log of pages that he or she has visited does not turn the standard delivery of web pages requested by a client into an order generation and fulfillment system as required by the claims of the '411 patent.

15. In addition, claims 6-10 of the '411 patent require a shopping cart ordering component in addition to the single action ordering component. The '780 patent does not disclose a shopping cart ordering component. That it appears impossible to “order” web pages using a shopping cart model suggests that web pages are not items to be ordered within the meaning of the claims

'411 patent. In any case, the access control system of the '780 patent lacks the other claim elements, i.e., order generate step/component and the shopping cart ordering component required by the claims of the '411 and, therefore, does not anticipate them.

[7] 16. Finally, the CompuServe Trend service does not anticipate any claim of the '411 patent. Each claim of the '411 patent (except 9 and 10) requires (with slightly different language) displaying information identifying the item to be ordered and a single action to be taken to order the item: "displaying information identifying the item; and in response to only a single action being performed, sending\*1241 a request to order the item" (claim 1); "a display component for displaying information identifying the item; a single-action ordering component that in response to performance of only a single action, sends a request to a server system to order the identified item" (claim 6); "displaying information identifying the item and displaying an indication of a single action that is to be performed to order the identified item" (claim 11).

17. In the CompuServe Trend system, to receive a chart the user has to type in the ticker symbol identifying the stock for which they want to order a chart. The system does not, therefore, identify an item that a user could order with a single action. Thus, CompuServe does not anticipate claims 1-8 or 11-26.

18. As described above with respect to the '780 patent, claims 6-10 of the '411 patent require a shopping cart ordering component in addition to the single-action ordering component. There is no evidence that the CompuServe Trend serve included a shopping cart component. It therefore does not, as Defendants acknowledge, anticipate claims 6-10.

### *Obviousness*

[8] 19. "Included within the presumption of validity mandated by 35 U.S.C. § 282 is a presumption of nonobviousness which the patent challenger must overcome by proving facts with clear and convincing evidence. The presumption remains intact even upon proof of prior art not cited by the Patent and Trademark Office (PTO), though such art, if more relevant than that cited, may enable the challenger to sustain its burden." *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 894 (Fed.Cir.1984) (citations omitted).

[9] 20. The issue of obviousness is a mixed question

of fact and law. The ultimate question is one of law, but it is based on several factual inquiries, including: (1) the scope and content of the prior art; (2) the differences between the prior art and the claims; (3) the level of ordinary skill in the pertinent art; and (4) applicable secondary considerations. See *Weatherchem Corp. v. J.L. Clark, Inc.*, 163 F.3d 1326, 1332 (Fed.Cir.1998).

[10] 21. Defendants' evidence relating to invalidity of claims of the '411 patent on the ground of obviousness consists largely of Dr. Lockwood's statements that he could modify his Web Basket system to actually be a single-action ordering system, and that doing so would be an "obvious" or "trivial" modification of the Web Basket system. (Tr. at 229; Ex. A-56, Lockwood Decl. ¶ 51) Dr. Lockwood, however, testified (as did Mr. Mulligan), that it had never occurred to him to do this. (Tr. at 277:19-23 (Lockwood); Tr. at 199:2-15 (Mulligan)). Mr. Mulligan further produced credible testimony why one skilled in the art would not, at the time the invention was made, have considered this modification. (Tr. at 190:21-191:2; 199:2-15).

22. In any event, whether it would be, at the present time, an "obvious" or "trivial" modification of the Web Basket system to include the "single action" feature of the '411 patent is legally irrelevant. The law is clear that the time period for any obviousness determination is "at the time the invention was made." 35 U.S.C. § 103(a). See also, *In re Dembiczaik*, 175 F.3d 994, 998-99 (Fed.Cir.1999).

23. "[O]bjective indicia 'may often be the most probative and cogent evidence of nonobviousness in the record.' " *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 (Fed.Cir.1997) (quoting *Stratoflex, Inc. v. Aeroquip, Corp.*, 713 F.2d 1530, 1538 (Fed.Cir.1983)); see also, *Arkie Lures Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 957 (Fed.Cir.1997) ("Indeed, evidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not.")

24. "Such secondary considerations as commercial success, long felt but unsolved needs, [and] failures of others" are relevant\*1242 as evidence of obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966). See also, *Arkie Lures Inc.*, 119 F.3d at 957 (Considerations of commercial success, licensing activities, and copying may be "highly probative of the issue of nonobviousness").

25. Copying of the invention by Barnesandnoble.com and others is additional evidence of nonobviousness. "It gives the tribute of its imitation, as others have done." *Diamond Rubber Co. v. Consolidated Rubber Tire Co.*, 220 U.S. 428, 441, 31 S.Ct. 444, 55 L.Ed. 527 (1911).

26. The adoption of single-action ordering by other e-commerce retailers following Amazon.com's introduction of the feature, coupled with the need to solve the problem of abandoned shopping carts by e-commerce customers, is additional evidence of nonobviousness. See *In re Hayes Microcomputer Products, Inc. Patent Litigation*, 982 F.2d 1527, 1540 (Fed.Cir.1992) ("[T]he commercial success of the invention, the failure of others to solve the problem addressed by the patented invention, and the fact that the [invention] has become the industry standard is compelling objective evidence of the nonobviousness of the claimed invention").

27. In light of its consideration of the factors and evidence related to the question of obviousness, the Court finds Barnesandnoble.com is unlikely to succeed in showing by clear and convincing evidence that the claims of the '411 patent were obvious. Barnesandnoble.com's reliance on the simplicity of the invention is unavailing. "Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness." *Monarch Knitting Machinery Corp. v. Sulzer Morat Gmbh*, 139 F.3d 877, 881 (Fed.Cir.1998).

### *Enforceability*

[11] 28. In their initial opposition to Plaintiff's motion for a preliminary injunction, Defendants argued that the '411 patent was unenforceable due to alleged inequitable conduct on the part of one of the inventors, Shel Kaphan. Specifically, Defendants alleged that Mr. Kaphan's failure to cite to the PTO an Internet Engineering Task Force draft entitled "State Management Mechanism" ("IETF Draft"), in which he is acknowledged as a contributor by the authors, constituted inequitable conduct. Defendants deposed Mr. Kaphan and submitted brief excerpts from his deposition to the Court. None of those excerpts related to his knowledge of the IETF Draft or any intent to deceive the patent office. The Court assumes that Defendants have abandoned their inequitable conduct claim, at least for the purposes of their opposition to the preliminary injunction motion. Indeed, Defendants presented no arguments based on unenforceability in their closing argument or in their

proposed findings of fact and conclusions of law.

[12] 29. In any event, the Court finds that Defendants' arguments regarding unenforceability lack substantial merit. The testimony of Mr. Mulligan, a member of the IETF, that the IETF Draft is less relevant to the '411 patent than cited references including one in a publication entitled "Dr. Dobbs Journal" that itself references the IETF Draft, is unopposed and dispositive. (Tr. at 174:13-25 (Mulligan)) A "patentee need not cite an otherwise material reference to the PTO if that reference is merely cumulative or is less material than other references already before the examiner." *Baxter Int'l, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1328 (Fed.Cir.1998).

### *Infringement Analysis*

30. Defendants have also argued that Plaintiff has not demonstrated that the "Express Lane" feature infringes any claims of the '411 patent. "[A]nalysis of patent infringement involves two steps: (1) claim construction to determine what the claims cover, i.e., their scope, followed by (2) determination of whether the properly construed claims encompass the accused structure." *Cole v. Kimberly-Clark Corp.* 102 F.3d 524, 528 (Fed.Cir.1996). The former<sup>\*</sup> is a question of law; the latter is a question of fact. See *Voice Technologies Group v. VMC Systems, Inc.*, 164 F.3d 605, 612 (Fed.Cir.1999). For ease of reference, the Court includes its entire infringement analysis in the Conclusions of Law section, even though it presents mixed questions of law and fact.

### *Claim Construction*

31. The parties do not dispute the meaning of most of the terms in the patent claims including: "client system"; "server system"; and "method for ordering." (See Tr. at 434:1-435:13 (King)). The parties disagree, however, as to the meaning of the terms "shopping cart model," "fulfillment," "single action," and "single-action ordering component."

[13] 32. Claims must be read in view of the specification of which they are a part. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995). Words defined in the specification should be given the same meaning in the claims. *McGill, Inc. v. John Zink Co.*, 736 F.2d 666, 674 (Fed.Cir.1984), cert. denied, 469 U.S. 1037, 105 S.Ct. 514, 83 L.Ed.2d 404 (1984), overruled on other grounds, *Markman*, 52 F.3d at 967. See also

Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 452 (Fed.Cir.1985) (the specification is the primary basis for construing claims).

[14] 33. The term “shopping cart model” is described in the Background of the Invention section of the '411 patent beginning at column 2 line 17: “The selection of various items is generally based on the ‘shopping cart’ model. When the purchaser selects an item from the electronic catalog, the server computer system metaphorically adds that item to a shopping cart. When the purchaser is done selecting items, then all the items in the shopping cart are ‘checked out’ (i.e., ordered) when the purchaser provides billing and shipping information.” As described at column 2 lines 34 through 43, in some cases the billing and shipping information may be prestored by the merchant and need only be confirmed to complete the checkout process.

34. The definition of shopping cart model in the background section of the '411 patent is consistent with that provided by Amazon.com's e-commerce experts Dr. Johnson and Mr. Mulligan. (See Ex. 10, Johnson Decl. at ¶ 14; Ex. 12, Mulligan Decl. at ¶ 7; Tr. at 167:19-168:9 (Mulligan)).

35. Dr. Lockwood defined a shopping cart model more broadly in a manner that could potentially include any method for buying on-line. (Tr. at 279:5-282:4). In general, the Court found Dr. Lockwood's description of the term “shopping cart model” to be confusing and inconsistent. Barnesandnoble.com's Chief Information Officer, Mr. King, gave a similarly broad definition of shopping cart model. (Tr. at 428:1-21). According to its own expert Dr. Lockwood, under Defendants' definition of shopping cart model, claims 1 and 11 would appear to be internally inconsistent. (See Tr. at 284:22-285:22). Similarly, Mr. King testified that with Barnesandnoble.com's definition of shopping cart model, claims 1 and 11 would not cover the single-action purchasing method described in the '411 patent. (Tr. at 428:1-21).

[15][16] 36. A claim interpretation that excludes the preferred embodiment is “rarely, if ever, correct.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed.Cir.1996). “When claims are amenable to more than one construction, they should when reasonably possible be interpreted so as to preserve their validity.” Modine Mfg. Co. v. U.S. Int'l Trade Comm'n, 75 F.3d 1545, 1557 (Fed.Cir.1996). The Court, therefore, rejects the definition of “shopping cart model” propounded by Defendants.

37. The Court adopts instead a definition which is consistent with the patent specification, preserves the validity of the claims, and allows the claims to be read on the preferred embodiment described in the patent specification. In construing the \*1244 claims, the Court, therefore, takes the term “shopping cart model” to mean a method for on-line ordering in which a user selects and accumulates items to be purchased while browsing a merchant's site and then must proceed to one or more checkout or confirmation steps in order to complete the purchase. (Ex. 12, Mulligan Supp. Decl. ¶¶ 5-6).

[17] 38. The second point of disagreement is the meaning of the terms “fulfill” and “order fulfillment component” in claims 6 and 9, and in particular whether “fulfill” or “fulfillment” refer to computer or physical process. Though the patent specification does not explicitly define the phrase, order “filling” and “fulfillment” is discussed at length at column 8 and figure 7 in the context of Amazon.com's order consolidation algorithm. That discussion and the entire specification describe only computer processes and an order is defined to be filled “when all its items are currently in inventory (i.e. available) and can be shipped.” In addition, Amazon.com's expert Mr. Mulligan testified that an “order fulfillment component” of a “server system” as required by claim 9 is “the software that takes the information provided by the database of the user information and the inventory database and combines those into a shipment order ... and then notifies that the order is ready for shipment.” (Tr. at 165:7-12).

39. Mr. Mulligan's above definition of “order fulfillment component” as a computer program is consistent with the out of court statements by Barnesandnoble.com's Chief Information Officer, Mr. King, regarding Barnesandnoble.com's “fulfillment application” in a recent interview with an industry trade press. (See Ex. 8). During cross-examination Mr. King testified that “fulfillment application” was a commonly used term in the industry to refer to computer programs associated with the fulfillment process. (Tr. at 432:25-433:8). The Court therefore finds that “order fulfillment component” as used in claim 9 refers to order fulfillment application software described by Mr. Mulligan and Mr. King.

40. Similarly, the Court finds that the term “fulfill” as used in claim 6 in the phrase, “so that the server system can fulfill the generated order,” refers to processes performed by the order fulfillment component of (or order fulfillment application running on) the server system and does not include the

physical steps of handling or packing tangible items.

[18] 41. The third point of disagreement concerns the terms "single action" and "single-action ordering component" as used in claims 1, 6, 9, and 11.

42. The term "single action" is not defined by patent specification. However, the patent specification provides that "once the description of an item is displayed, the purchaser need only take a single action to place the order to purchase that item." (Ex. A-1 at col. 3, ll. 64-66). The specification also provides that "a single action may be preceded by multiple physical movements of the purchaser (e.g., moving a mouse so that a mouse pointer is over a button)." (Ex. A-1 at col. 10, ll. 2-4). In addition, the specification indicates "[i]n general, the purchaser need only be aware of the item or items to be ordered by the single action *and* of the single action needed to place the order." (Ex. A-1 at col. 4, ll. 14-17 (emphasis added)). As a result, the term "single action" as used in the '411 patent appears to refer to one action (such as clicking a mouse button) that a user takes to purchase an item once the following information is displayed to the user: (1) a description of the item; and (2) a description of the single action the user must take to complete a purchase order for that item.

43. The parties dispute what mouse clicks "count" in determining whether the single-action requirement of the '411 patent claims is satisfied. The Court finds that clicks "count" after both information identifying the item and a description of the single action the user must take to complete a purchase order for that item are displayed to the user.

\*1245 *Comparison of the '411 Patent Claims to Defendants' Express Lane Feature*

[19] 44. In its opening papers, Amazon.com provided a declaration from its expert Mr. Mulligan explaining in detail where every element of claims 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 21, 22, 23, 24 is presented in Barnesandnoble.com's Express Lane ordering system. (Ex. 9, Mulligan Decl.). Mr. Mulligan described his analysis with respect to independent claims 9 and 11 in his testimony before the Court. (Tr. at 161:2-169:4).

45. In their pre-hearing briefing, Defendants only disputed Mr. Mulligan's analysis with respect to the meaning of fulfillment in claims 6 and 9 and the meaning of "shopping cart model" in claims 1 and 11. (Ex. A-16, King Decl. ¶¶ 8-12). Mr. King

acknowledged that Barnesandnoble.com's Express Lane included every element of claims 11 except the last, which requires that the item is ordered independently of a shopping cart model. (Tr. at 434:1-435:13).

46. Because the Court adopts the patent specification's description of the term "shopping cart model," which is consistent with Mr. Mulligan's testimony, the Court finds that Barnesandnoble.com infringes claims, 1, 2, 3, 5, 11, 12, 14, 15, 16, 17, 21, 22, 23, 24.

47. The Court has also found that the terms "fulfill" and "order fulfillment component" in claims 6 and 9 do not include the retailer's acts of physically locating, packaging, and shipping a tangible item after a purchase order is completed. The Court, therefore finds that Barnesandnoble.com also infringes claims 6-10 of the '411 patent.

48. At the hearing on this motion, Defendants argued that Barnesandnoble.com's Express Lane option was not a "single-action ordering component" as required by claims 1, 3, 5, 6, 7, 8, 9, 10, because a user of Express Lane must take more than one action from the first time that some information regarding an item is displayed. The Court finds this argument unavailing. Except in court, Barnesandnoble.com everywhere has described its Express Lane as "one-click ordering," including on its web site and its communications with shareholders and prospective shareholders filed with the Securities Exchange Commission. (Tr. at 464:3-8; Tr. at 464:24-467:22 (Bulkeley Ex. 36 at 6, 44, 47). Moreover, the Court agrees with the testimony of Mr. Mulligan that browsing a site is not ordering and that one does not begin the ordering process until one is past the home page and is presented with an opportunity to order an item. (Tr. at 185:3-8; Tr. at 191:7-15). This occurs for the first time at the product or detail page on the Barnesandnoble.com site. (*Id.* and Ex. 9, Mulligan Decl., Ex., R). From there, as noted on Barnesandnoble.com's own web page, ordering with the Express Lane option requires only a single click. (*Id.*)

[20] 49. Mr. King testified that he was provided with a copy of the '411 patent by Barnesandnoble.com's outside counsel in early October, 1999. (Tr. at 417:9-19). It was the first time that Mr. King had ever received a patent from Barnesandnoble.com's outside counsel. (Tr. at 417:20-22). "Where, as here, a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing." Underwater Devices, Inc. v. Morrison-Knudsen Co.

717 F.2d 1380, 1389 (Fed.Cir.1983).

### **Summary**

50. Based on the foregoing, the Court finds that Plaintiff has demonstrated a reasonable likelihood of success on the merits at trial.

#### **B. Irreparable Harm**

[21] 51. The Court finds that Plaintiff has made a strong showing that the '411 patent is valid and that Defendants' Express Lane feature infringes the patent. Plaintiff is therefore entitled to a presumption of irreparable harm. *See, e.g., \*1246 Smith Int'l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1581 (Fed.Cir.1983) (holding "where validity and continuing infringement have been clearly established ... immediate irreparable harm is presumed"). While Defendants have raised a number of defenses regarding validity, noninfringement, and enforceability, the Court finds that Plaintiff has established that these defenses lack substantial merit.

52. In light of Plaintiff's strong showing of validity and infringement, Defendants can rebut the presumption of irreparable harm only in limited circumstances not applicable here, such as that (1) the allegedly infringing activities have ended or will soon end; (2) the movant has engaged in a pattern of granting licenses; or (3) the movant unduly delayed in bringing suit. *See Polymer Technologies, Inc. v. Bridwell*, 103 F.3d 970, 974 (Fed.Cir.1996). Absent these facts or Defendants' "proffer of similar evidence," the Federal Circuit has indicated that "infringement of a valid patent inherently causes irreparable harm." *Id.* at 975.

53. Defendants attempt to invoke the category of undue delay, arguing that Amazon.com should have filed their suit immediately upon issuance of the patent. However, Amazon.com filed this action 22 days after its patent was issued. The Court is unaware of any authority indicating that filing a motion for a preliminary injunction less than a month after a patent is issued constitutes an undue delay. Instead, cases citing undue delay as a factor to be considered on a motion for preliminary injunction address delays of months or years, not days. *See Mentor Graphics Corp. v. Quickturn Design Systems, Inc.*, 999 F.Supp. 1388 (D.Or.1997) (delay of more than one year between the filing of patent infringement action and the filing of a motion for a preliminary injunction did

not bar the patentee from obtaining a preliminary injunction), *aff'd* 150 F.3d 1374 (Fed.Cir.1998); *Rubbermaid Commercial Prods., Inc. v. Contico Int'l., Inc.*, 836 F.Supp. 1247 (W.D.Va.1993) (eight months no bar); *Motorola, Inc. v. Alexander Mfg. Co.*, 786 F.Supp. 808 (N.D.Iowa 1991) (three months no bar); *SMI Industries Canada Ltd. v. Caelter Industries, Inc.*, 586 F.Supp. 808 (N.D.N.Y.1984) (six months no bar).

54. Defendants also suggest that Amazon.com engaged in undue delay by not paying its Issue Fee for the '411 patent until six weeks after receiving the Notice of Allowability for the patent. Defendants cite no authority which indicates that this type of delay is either undue or even relevant. Moreover, as former PTO Commissioner Harry Manbeck testified, taking six weeks between the Notice of Allowability and payment of the Issue Fee is not unusual, and is probably shorter than average period. (Ex. 13, Manbeck Dec. ¶ 17).

[22] 55. Beyond the presumption of irreparable harm, there is additional evidence of irreparable harm in the record. Irreparable harm can also be shown by demonstrating that damages are an inadequate remedy. The Federal Circuit uses a variety of factors to determine whether irreparable harm exists. *See Mills*, "The Developing Standard for Irreparable Harm in Preliminary Injunctions to Prevent Patent Infringement," 81 J. Pat. & Trademark Off. Soc'y 51, 65-66 (Jan.1999) (listing factors); *see also Jacobson v. Cox Paving Co.*, 19 U.S.P.Q.2d 1641, 1653 (D.Ariz.1991) (listing factors and noting that courts have issued injunctions after finding only a few), *aff'd*, 949 F.2d 404 (Fed.Cir.1991).

[23] 56. All of the following factors here weigh in favor of a finding of irreparable harm: the parties are direct competitors trying to influence the same group of customers; Amazon.com spent significant time and effort on market development; Defendants' continuing infringement is likely to undermine Amazon.com's market position; and Defendants' unchecked infringement will encourage others to infringe. *See Mills, supra; see also Atlas Powder Co.*, 773 F.2d at 1233 ("If monetary relief were the sole relief afforded by the patent statute then ... infringers could become compulsory licensees for as \*1247 long as the litigation lasts"). These sorts of indirect effects are the reason the statute includes injunctive remedies. *See Hybritech*, 849 F.2d at 1457 ("The patent statute provides injunctive relief to preserve the legal interests of the parties against future infringement which may have market effects never fully compensable in money").

57. Amazon.com has presented the testimony of its founder and chairman, Jeff Bezos, and of an e-commerce expert, Dr. Eric Johnson, explaining the significant of single-action ordering and of reducing "friction" in customer experiences of shopping on-line. They provided both opinion and empirical evidence that reducing the number of steps a customer must take to make a purchase increases the likelihood that the customer will complete that purchase. (See Ex. 10, Johnson Decl. ¶ 10; Ex. 11, Bezos Decl. ¶ 8) A single-action ordering method is valuable because it reduces the steps that an on-line customer must take when making a purchase. The evidence adduced from Barnesandnoble.com regarding the problem of abandoned shopping carts (an "industry standard" 65% of them are never checked out) and the popularity of its single-action Express Lane feature corroborate the commercial value of the '411 patent. (See Ex. 28; Tr. at 418:1-11; 420:9-421:18 (King); 473:14-474:5 (Bulkeley)).

58. Amazon.com's witnesses also described how and why the upcoming holiday season will be critical to the online retailing industry. (Ex. 10, Johnson Decl. ¶ ¶ 16-17; Ex. 11, Bezos Decl. ¶ 20). They presented evidence that invaluable customer loyalty and goodwill will be irreparably lost to Defendants if they are allowed to continue to infringe, particularly in the next two critical months for e-commerce retailing. As the Federal Circuit has explained, "Competitors change the marketplace. Years after infringement has begun, it may be impossible to restore a patentee's ... exclusive position by an award of damages and a permanent injunction." Polymer Technologies, 103 F.3d at 975-76. Again, the testimony from Barnesandnoble.com corroborates Amazon.com's claim that the 1999 holiday season will be extremely important commercially to on-line retailers. (See Tr. at 474:9-18 (Bulkeley)).

[24] 59. Defendants argue that Amazon.com is not entitled to an injunction because its injuries can be compensated in money damages. The cases they cite all hinge on a finding, not applicable here, that the patentee was not entitled to a presumption of irreparable harm because it had not made a clear showing of validity and infringement. See Nutrition 21 v. Thorne Research, Inc., 930 F.2d 867, 871 (Fed.Cir.1991); Eli Lilly & Co. v. American Cyanamid Co., 896 F.Supp. 851, 860 (S.D.Ind.1995). Where the presumption of irreparable harm applies, that plaintiff's injuries are fully compensable cannot alone justify a finding that defendants rebutted the presumption of irreparable harm. Polymer

Technologies, 103 F.3d at 975-76.

60. Here, Amazon.com has presented ample evidence that the harm it asks the Court to prevent-losing the opportunity to distinguish itself and build customer loyalty at a critical time-can not be reduced to a simple formula. See Hybritech, 849 F.2d at 1456-57 ("It is well-settled that ... the nature of the patent grant weighs against holding that monetary damages will always suffice to make the patentee whole"). There is no easy way to determine the value of the relationships and loyalties that millions of customers establish with Internet retailers over the next several months.

61. Neither side is able to offer any formula that is readily available for determining what damages might be.

62. Amazon.com's patent entitles it to the exclusive right to offer its single-action ordering invention, and to reap the value that feature adds to its site. Defendants' use of the Express Lane feature, as currently configured, would deny Amazon.com of the benefit of its patent. Barnesandnoble.com has failed to demonstrate that the \*1248 value of the use of the patent can be calculated in dollars.

63. Amazon.com is presumptively and actually suffering irreparable injury because of Defendants' infringement. The Court concludes that only a preliminary injunction will prevent that harm.

### C. Balance Of Hardships

[25][26] 64. The balance of hardships between the parties also favors granting Amazon.com's motion for preliminary injunction. The Court must weigh the threatened injury to the patent holder if injunctive relief is not granted against the injury to the accused infringer if the preliminary injunction is granted. See Hybritech Inc., 849 F.2d at 1457. Here, the balance of hardships tips in Amazon.com's favor. Any harm suffered by Barnesandnoble.com would result directly from its misappropriation of Amazon.com's patented purchasing method. The balance of hardships does not favor a defendant where the defendant "took a calculated risk that it might infringe [plaintiff's] patents." Smith Int'l, Inc. v. Hughes Tool Co., 718 F.2d 1573, 1581 (Fed.Cir.1983).

65. Moreover, the evidence indicates that Barnesandnoble.com can modify its "Express Lane" feature with relative ease to avoid infringement of the '411 patent. For instance, infringement can be

avoided by simply requiring users to take an additional action to confirm orders placed by using Express Lane. (Tr. at 530:8-13).

66. The harm to Amazon.com is more extensive. Without this injunction, Amazon.com will lose the primary value of the 1-Click® option: its role in distinguishing the Amazon.com site from the site of a key competitor. (See Ex. 10, Johnson Decl. ¶¶ 8-12).

67. Aside from the need to take steps to modify its Express Lane feature, Defendants' only testimony or evidence of any harm it will suffer if it is enjoined from infringing the '411 patent is that calls to its customer service phone lines will increase because of the change to its users' experience. (Tr. at 458:15-19). Barnesandnoble's concerns about customer service calls or possible temporary interruptions in its website operation would not tip the balance in favor of an infringing defendant. See *PPG Indus., Inc. v. Guardian Indus. Corp.*, 75 F.3d 1558, 1567 (Fed.Cir.1996) (it was less burdensome on infringer to suffer "a temporary interruption" in the infringer's production and sale of its product where patentee would suffer significant harm from denial of preliminary injunction).

68. As Dr. Johnson points out, on-line retailers have great freedom with which they can create their own unique consumer experiences. (Ex. 10, Johnson Decl. ¶ 15). As noted above, Barnesandnoble.com could modify Express Lane to employ any non-infringing ordering system, including any that requires two or more actions. Moreover, in addition to "Express Lane," Barnesandnoble.com offers a multi-step "shopping cart" ordering system, so it does not need single-action ordering to keep its site running. Many other on-line retailers operate their businesses using multi-step ordering, and Barnesandnoble.com can as well. (See Ex. 11, Bezos Decl. at ¶ 21).

69. Mr. King testified that it would be possible to remove the Express Lane feature from the Barnesandnoble.com site and that he has already met with his developers to discuss it. (Tr. at 435:14-19).

70. Finally, the question of whether the balance of hardships tips in Amazon.com's favor is necessarily related to its showing of a likelihood of success on the merits. "Because the court must balance the hardships, at least in part in light of its estimate of what is likely to happen at trial, it must consider the movant's showing of likelihood of success." *Illinois Tool Works, Inc. v. Grip-Pak, Inc.*, 906 F.2d 679, 683 (Fed.Cir.1990). Amazon.com's strong showing of

likelihood of success further tips the balance of hardships in its favor.

#### D. Public Interest

[27] 71. The public is served by innovation on the Internet and in electronic \*1249 commerce, particularly now while it is still developing rapidly. Competition to provide unique, effective and enjoyable consumer experiences will lead to innovation and diversity in on-line commerce. (Ex. 11, Bezos Decl. ¶ 22). On the other hand, innovation will be discouraged if competitors are permitted a free ride on each other's patented inventions. Protection of intellectual property rights in innovations will foster greater competition and innovation. (Ex. 11, Bezos Decl. ¶ 22; Ex. 10, Johnson Decl. ¶ 15).

72. Granting Amazon.com's preliminary injunction will serve the public interest. The public has a strong interest in the enforcement of intellectual property rights. The purpose of the patent system is to reward inventors and provide incentives for further innovation by preventing others from exploiting their work. See *E.I. du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc.*, 706 F.Supp. 1135, 1146 (D.Del.1989), aff'd 887 F.2d 1095 (Fed.Cir.1989). Encouraging Amazon.com to continue to innovate-and forcing competitors to come up with their own new ideas-unquestionably best serves the public interest.

73. Defendants' argument that the injunction would not serve the public interest presupposes that the '411 patent is invalid and not infringed. Amazon.com has established that Defendants' defenses lack substantial merit. The Amazon.com inventors are therefore entitled "to reap the benefits of their labor" and "prevent others from practicing what they have invented." *E.I. du Pont de Nemours & Co.*, 706 F.Supp. at 1146. This is particularly true in a rapidly developing industry where the window of opportunity to reap the benefits is likely to be short-lived, given the fertile climate for e-commerce inventions.

#### E. Other Arguments

74. Defendants have also offered a variety of other arguments against issuance of the preliminary injunction. They have suggested, for instance, that: (1) Amazon.com should have warned potential infringers that a patent application was pending for the '411 patent prior to its issuance; (2) Amazon.com

somewhat inequitably timed the issue date of the patent to fall near the 1999 holiday season; and (3) Defendants' due process rights would be abrogated if they only had a few weeks to prepare for a hearing on Amazon.com's motion for a preliminary injunction. Defendants have cited no relevant case law to the Court in support of these arguments, and the Court finds these arguments unconvincing.

#### IV. CONCLUSION

Therefore, the Court hereby ORDERS that Defendants Barnesandnoble.com LLC and Barnesandnoble.com Inc., their offers, agents, servants, employees and attorneys and those in active concert or participation with them or Defendants ARE HEREBY RESTRAINED AND ENJOINED from continuing to infringe United States Patent No. 5,960,411, including by continuing to make or use within the United States Defendants' Express Lane feature as currently configured or any other single-action ordering system that employs the methods or systems of the '411 patent, or by inducing others to make or use within the United States Defendants' Express Lane feature as currently configured or any other single-action ordering system that employs the methods of systems of the '411 patent. Defendants may continue to offer an Express Lane feature if the feature is modified to avoid infringement of the '411 patent in a manner that is consistent with the findings of fact and conclusions of law set forth above.

The above Preliminary Injunction is effective at 12:01 a.m. P.S.T. on Saturday, December 4, 1999, and upon Amazon.com's filing an undertaking in the sum of \$10,000,000 and shall remain in effect during the pendency of this action.

W.D.Wash.,1999.  
Amazon.com, Inc. v. Barnesandnoble.com, Inc.  
73 F.Supp.2d 1228, 53 U.S.P.Q.2d 1115

Briefs and Other Related Documents ([Back to top](#))

- [2:99cv01695 \(Docket\) \(Oct. 21, 1999\)](#)

END OF DOCUMENT

**H**Briefs and Other Related Documents

United States Court of Appeals, Federal Circuit.  
 AMAZON.COM, INC., Plaintiff-Appellee,  
 v.  
 BARNESANDNOBLE.COM, INC., and  
 Barnesandnoble.Com, LLC, Defendants-Appellants.  
 No. 00-1109.

Feb. 14, 2001.

Patentee brought action against competitor, alleging infringement of patent claiming a "1-Click®" method and system for placing a purchase order over the Internet. Patentee's motion for preliminary injunction was granted by the United States District Court for the Western District of Washington, Marsha J. Pechman, J., 73 F.Supp.2d 1228, and competitor appealed. The Court of Appeals, Clevenger, Circuit Judge, held that: (1) patentee demonstrated likely literal infringement of at least the four independent claims of the patent, but (2) competitor mounted a serious challenge, based on obviousness in light of on prior art, to the validity of the patent, precluding preliminary injunction.

Vacated and remanded.

## West Headnotes

[1] Patents 291 ↗ 293.1291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k293.1 k. In General. Most Cited Cases

The grant or denial of a preliminary injunction in a patent infringement case is within the sound discretion of the district court. 35 U.S.C.A. § 283.

[2] Patents 291 ↗ 298

291 Patents  
291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k298 k. Establishment of Infringement. Most Cited Cases

Patents 291 ↗ 300291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k300 k. Irreparable or Comparative Injury. Most Cited Cases

Patents 291 ↗ 301(5)291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k301 Grounds for Denial in General  
291k301(5) k. Injury or Inconvenience to Public. Most Cited Cases

As the moving party in patent infringement case, patentee was entitled to a preliminary injunction if it could succeed in showing: (1) a reasonable likelihood of success on the merits; (2) irreparable harm if an injunction was not granted; (3) a balance of hardships tipping in its favor; and (4) the injunction's favorable impact on the public interest. 35 U.S.C.A. § 283.

[3] Patents 291 ↗ 300291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k300 k. Irreparable or Comparative Injury. Most Cited Cases

Irreparable harm is presumed, for purposes of entitlement to a preliminary injunction in a patent infringement case, when a clear showing of patent validity and infringement has been made. 35 U.S.C.A. § 283.

[4] Patents 291 ↗ 298291 Patents

291XII Infringement  
291XII(C) Suits in Equity  
291k293 Preliminary Injunction  
291k298 k. Establishment of Infringement. Most Cited Cases

Patents 291 ↗ 300

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k300 k. Irreparable or Comparative Injury. Most Cited Cases

A movant cannot be granted a preliminary injunction in a patent infringement case unless it establishes both of the first two factors: likelihood of success on the merits and irreparable harm. 35 U.S.C.A. § 283.

[5] Patents 291  295

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. Most Cited Cases

Patents 291  298

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k298 k. Establishment of Infringement. Most Cited Cases

In order to demonstrate a likelihood of success on the merits, for purposes of obtaining a preliminary injunction in a patent infringement case, patentee must show that, in light of the presumptions and burdens that will inhere at trial on the merits, (1) patentee will likely prove that competitor infringes the patent, and (2) patentee's infringement claim will likely withstand competitor's challenges to the validity and enforceability of the patent; thus if competitor raises a substantial question concerning either infringement or validity, the preliminary injunction should not issue. 35 U.S.C.A. § 283.

[6] Patents 291  118

291 Patents

291V Requisites and Validity of Letters Patent

291k118 k. Validity in General. Most Cited Cases

Patents 291  226.6

291 Patents

291XII Infringement

291XII(A) What Constitutes Infringement

291k226.5 Substantial Identity of Subject

Matter

291k226.6 k. Comparison with Claims of Patent. Most Cited Cases

Infringement and validity analyses must be performed on a claim-by-claim basis. 35 U.S.C.A. § 282.

[7] Patents 291  295

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. Most Cited Cases

Patents 291  298

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k298 k. Establishment of Infringement. Most Cited Cases

In cases involving multiple patent claims, to demonstrate a likelihood of success on the merits for purposes of obtaining a preliminary injunction, the patentee must demonstrate that it will likely prove infringement of one or more claims of the patents-in-suit, and that at least one of those same allegedly infringed claims will also likely withstand the validity challenges presented by the accused infringer. 35 U.S.C.A. § 283.

[8] Patents 291  226.6

291 Patents

291XII Infringement

291XII(A) What Constitutes Infringement

291k226.5 Substantial Identity of Subject

Matter

291k226.6 k. Comparison with Claims of Patent. Most Cited Cases

Patent infringement analysis involves two steps: the claim scope is first determined, and then the properly construed claim is compared with the accused device to determine whether all of the claim limitations are present either literally or by a substantial equivalent.

[9] Patents 291  157(1)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(A) In General

291k157 General Rules of Construction  
291k157(l) k. In General. Most Cited

Cases

Because the claims of a patent measure the invention at issue, the claims must be interpreted and given the same meaning for purposes of both validity and infringement analyses.

[10] Patents 291 157(1)

291 Patents

291IX Construction and Operation of Letters Patent

291IX(A) In General

291k157 General Rules of Construction  
291k157(l) k. In General. Most Cited

Cases

Court of Appeals for the Federal Circuit will not assign a meaning to a patent claim that depends on the state of mind of the accused infringer.

[11] Patents 291 101(2)

291 Patents

291IV Applications and Proceedings Thereon

291k101 Claims

291k101(2) k. Construction in General. Most Cited Cases

Within patent claiming a single action method and system for placing a purchase order over the Internet, all four independent claims called for the single action to be performed immediately after a display of information about an item and without any intervening action, but not necessarily immediately after the first display or every display.

[12] Patents 291 298

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k298 k. Establishment of Infringement. Most Cited Cases

For purposes of entitlement to a preliminary injunction in a patent infringement case, patentee demonstrated likely literal infringement of at least the four independent claims of patent claiming a single action method and system for placing a purchase order over the Internet.

[13] Patents 291 298

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k298 k. Establishment of Infringement. Most Cited Cases

The relevant determination at the preliminary injunction stage of a patent infringement suit is substantial likelihood of success by patentee of its infringement claims, not a legal conclusion as to the ultimate issue of infringement. 35 U.S.C.A. § 283.

[14] Patents 291 101(3)

291 Patents

291IV Applications and Proceedings Thereon

291k101 Claims

291k101(3) k. Limitations in General. Most Cited Cases

The “shopping cart model” excluded from claims of patent claiming a single action method and system for placing a purchase order over the Internet was properly interpreted to mean “a method for on-line ordering in which a user selects and accumulates items to be purchased while browsing a merchant’s site and then must proceed to one or more checkout or confirmation steps in order to complete the purchase.”

[15] Patents 291 101(3)

291 Patents

291IV Applications and Proceedings Thereon

291k101 Claims

291k101(3) k. Limitations in General. Most Cited Cases

Within claims of patent claiming a single action method and system for placing a purchase order over the Internet, providing that the server system have the capability to “fulfill the generated order to complete purchase of the item” and that the single action ordering component of the server system must include “an order fulfillment component that completes a purchase of the item,” the terms “fulfill” and its cognates were properly limited to refer to order fulfillment application software executed on the server system.

[16] Patents 291 314(5)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k314 Hearing

291k314(5) k. Questions of Law or Fact. Most Cited Cases

**Patents 291**  324.55(3.1)

**291 Patents**

291XII Infringement

291XII(C) Suits in Equity

291k324 Appeal

291k324.55 Questions of Fact, Verdicts, and Findings

291k324.55(3) Issues of Validity

291k324.55(3.1) k. In General.

**Most Cited Cases**

In patent invalidity analysis, what a prior art reference teaches is a question of fact, and Court of Appeals reviews the district court's assessment of the prior art references for clear error.

**[17] Patents 291**  295

**291 Patents**

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. **Most Cited Cases**

Patent validity challenges during preliminary injunction proceedings can be successful, that is, they may raise substantial questions of invalidity, precluding the preliminary injunction, on evidence that would not suffice to support a judgment of invalidity at trial; the test for invalidity at trial is by evidence that is clear and convincing, but showing of a substantial question as to invalidity requires less proof than the clear and convincing showing.

**[18] Patents 291**  295

**291 Patents**

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. **Most Cited Cases**

When moving for the extraordinary relief of a preliminary injunction, a patentee need not establish the validity of a patent beyond question, but the patentee must present a clear case supporting the validity of the patent in suit. 35 U.S.C.A. § 283.

**[19] Patents 291**  295

**291 Patents**

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. **Most Cited Cases**

A clear case supporting the validity of the patent in suit, for purposes of obtaining a preliminary injunction in a patent infringement case, might be supported by showing that the patent in suit had successfully withstood previous validity challenges in other proceedings, and further support for such a clear case might come from a long period of industry acquiescence in the patent's validity. 35 U.S.C.A. § 283.

**[20] Patents 291**  295

**291 Patents**

291XII Infringement

291XII(C) Suits in Equity

291k293 Preliminary Injunction

291k295 k. Establishment of Validity of Patent in General. **Most Cited Cases**

Competitor mounted a serious challenge, based on obviousness in light of prior art, to the validity of patent claiming a single action method and system for placing a purchase order over the Internet, precluding preliminary injunction. 35 U.S.C.A. § 283.

**[21] Patents 291**  36(1)

**291 Patents**

291II Patentability

291II(A) Invention; Obviousness

291k36 Weight and Sufficiency

291k36(1) k. In General. **Most Cited Cases**

“Admission” by competitor's expert that he personally never thought of combining or modifying the prior art to come up with the claimed invention was irrelevant to issue of obviousness; the relevant inquiry was what a hypothetical ordinarily skilled artisan would have gleaned from the cited references at the time that the patent application leading to the patent was filed.

**[22] Patents 291**  64

**291 Patents**

291II Patentability

291II(D) Anticipation

291k63 Prior Patents

291k64 k. Requisites and Validity in General. **Most Cited Cases**

Patent based on a patent application filed in the United States before the application that matured into the patent at issue qualified as “prior art.” 35 U.S.C.A. §

102(e).

[23] Patents 291 36.1(2)

291 Patents

291II Patentability

291II(A) Invention; Obviousness

291k36 Weight and Sufficiency

291k36.1 Secondary Factors Affecting Invention or Obviousness

291k36.1(2) k. Imitation or Copying.

Most Cited Cases

Evidence of copying of the "1-Click®" feature of patent claiming a "1-Click®" method and system for placing a purchase order over the Internet was legally irrelevant to issue of obviousness unless that feature was shown to be an embodiment of the claims, and to the extent patentee could demonstrate that its "1-Click®" feature embodied any asserted claims of the patent under the correct claim interpretation, evidence of copying by competitors was not sufficient to demonstrate nonobviousness of the claimed invention, in view of the substantial question of validity raised by the prior art references.

[24] Patents 291 36.1(3)

291 Patents

291II Patentability

291II(A) Invention; Obviousness

291k36 Weight and Sufficiency

291k36.1 Secondary Factors Affecting Invention or Obviousness

291k36.1(3) k. Longstanding Need and Solution to Problems. Most Cited Cases

Nonobviousness of patent claiming a "1-Click®" method and system for placing a purchase order over the Internet was not supported by the "need to solve the problem of abandoned shopping carts," where this problem was not even mentioned in the patent, and where patentee did not submit any evidence to show either that its commercial success was related to the "1-Click®" ordering feature, or that single-action ordering caused a reduction in the number of abandoned "shopping carts."

Patents 291 328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited Cases

5,708,780. Cited As Prior Art.

Patents 291 328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited Cases

5,960,411. Construed.

\*1346 Lynn H. Pasahow, McCutchen, Doyle, Brown & Enersen, LLP, of Palo Alto, CA, argued for plaintiff-appellee. With him on the brief were J. David Hadden, of Palo Alto; and Beth H. Parker, Christopher B. Hockett, and Thomas S. Hixson, of San Francisco, from McCutchen, Doyle, Brown & Enersen, LLP. Of counsel was John R. Reese, McCutchen, Doyle, Brown & Enersen, LLP, of San Francisco, CA. Of counsel on the brief were David J. Burman, Brian G. Bodine, and Jerry A. Riedinger, Perkins Coie, LLP, of Seattle, WA.

Jonathan A. Marshall, Pennie & Edmonds LLP, of New York, NY, argued for defendants-appellants. With him on the brief were William G. Pecau, and Steven I. Wallach. Of counsel on the brief were Michael N. Rosen, and Mark J. Sugarman, Robinson Silverman Pearce Aronsohn & Berman LLP, of New York, NY. Of counsel was Stanton T. Lawrence III, of Pennie & Edmonds, of Washington, DC.

Before CLEVINGER, GAJARSA and LINN, Circuit Judges.

CLEVINGER, Circuit Judge.

This is a patent infringement suit brought by Amazon.com, Inc. ("Amazon") against barnesandnoble.com, inc., and barnesandnoble.com llc (together, "BN"). Amazon moved for a preliminary injunction to prohibit BN's use of a feature of its web site called "Express Lane." BN resisted\*1347 the preliminary injunction on several grounds, including that its Express Lane feature did not infringe the claims of Amazon's patent, and that substantial questions exist as to the validity of Amazon's patent. The United States District Court for the Western District of Washington rejected BN's contentions. Instead, the district court held that Amazon had presented a case showing a likelihood of infringement by BN, and that BN's challenges to the validity of the patent in suit lacked sufficient merit to avoid awarding extraordinary preliminary injunctive relief to Amazon. The district court granted Amazon's motion, and now BN brings its timely

appeal from the order entering the preliminary injunction. We have jurisdiction to review the district court's order under 28 U.S.C. § 1292(c)(1) (1994).

After careful review of the district court's opinion, the record, and the arguments advanced by the parties, we conclude that BN has mounted a substantial challenge to the validity of the patent in suit. Because Amazon is not entitled to preliminary injunctive relief under these circumstances, we vacate the order of the district court that set the preliminary injunction in place and remand the case for further proceedings.

## I

This case involves United States Patent No. 5,960,411 ("the 411 patent"), which issued on September 28, 1999, and is assigned to Amazon. On October 21, 1999, Amazon brought suit against BN alleging infringement of the patent and seeking a preliminary injunction.

Amazon's patent is directed to a method and system for "single action" ordering of items in a client/server environment such as the Internet. In the context of the 411 patent, a client/server environment describes the relationship between two computer systems in which a program executing on a client computer system makes a service request from another program executing on a server computer system, which fulfills the request. See col. 1, ll. 10-31; col. 3, ll. 31-33; col. 5, l. 56 to col. 6, l. 21; Fig. 2. Typically, the client computer system and the server computer system are located remotely from each other and communicate via a data communication network.

The 411 patent describes a method and system in which a consumer can complete a purchase order for an item via an electronic network using only a "single action," such as the click of a computer mouse button on the client computer system. Amazon developed the patent to cope with what it considered to be frustrations presented by what is known as the "shopping cart model" purchase system for electronic commerce purchasing events. In previous incarnations of the shopping cart model, a purchaser using a client computer system (such as a personal computer executing a web browser program) could select an item from an electronic catalog, typically by clicking on an "Add to Shopping Cart" icon, thereby placing the item in the "virtual" shopping cart. Other items from the catalog could be added to the shopping cart in the same manner. When the shopper completed the selecting process, the electronic

commercial event would move to the check-out counter, so to speak. Then, information regarding the purchaser's identity, billing and shipping addresses, and credit payment method would be inserted into the transactional information base by the soon-to-be purchaser. Finally, the purchaser would "click" on a button displayed on the screen or somehow issue a command to execute the completed order, and the server computer system would verify and store the information concerning the transaction.

As is evident from the foregoing, an electronic commerce purchaser using the shopping cart model is required to perform \*1348 several actions before achieving the ultimate goal of the placed order. The 411 patent sought to reduce the number of actions required from a consumer to effect a placed order. In the words of the written description of the 411 patent: The present invention provides a method and system for single-action ordering of items in a client/server environment. The single-action ordering system of the present invention reduces the number of purchaser interactions needed to place an order and reduces the amount of sensitive information that is transmitted between a client system and a server system.

Col. 3, ll. 31-37. How, one may ask, is the number of purchaser interactions reduced? The answer is that the number of purchaser interactions is reduced because the purchaser has previously visited the seller's web site and has previously entered into the database of the seller all of the required billing and shipping information that is needed to effect a sales transaction. Thereafter, when the purchaser visits the seller's web site and wishes to purchase a product from that site, the patent specifies that only a single action is necessary to place the order for the item. In the words of the written description, "once the description of an item is displayed, the purchaser need only take a single action to place the order to purchase that item." Col. 3, ll. 64-66.

## II

The 411 patent has 26 claims, 4 of which are independent. Independent claims 1 and 11 are method claims directed to placing an order for an item, while independent claim 6 is an apparatus claim directed to a client system for ordering an item, and independent claim 9 is an apparatus claim directed to a server system for generating an order. Amazon asserted claims 1-3, 5-12, 14-17, and 21-24 against BN. Although there are significant differences among the various independent and dependent claims in issue,

for purposes of this appeal we may initially direct our primary focus on the "single action" limitation that is included in each claim. This focus is appropriate because BN's appeal attacks the injunction on the grounds that either its accused method does not infringe the "single action" limitation present in all of the claims, that the "single action" feature of the patent is invalid, or both.

We set forth below the text of the claims pertinent to our deliberations (*i.e.*, claims 1, 2, 6, 9, and 11), with emphasis added to highlight the disputed claim terms:

1. A method of placing an order for an item comprising:  
under control of a client system,  
displaying information identifying the item; and *in response to only a single action being performed*,  
sending a request to order the item along with an identifier of a purchaser of the item to a server system;  
under control of a *single-action ordering component* of the server system, receiving the request; retrieving additional information previously stored for the purchaser identified by the identifier in the received request; and generating an order to purchase the requested item for the purchaser identified by the identifier in the received request using the retrieved additional information; and *fulfilling the generated order* to complete purchase of the item whereby the item is ordered without using a *shopping cart ordering model*.

2. The method of claim 1 wherein the displaying of information includes displaying information indicating *the single action*.

6. A client system for ordering an item comprising: an identifier that \*1349 identifies a customer; a display component for displaying information identifying the item;  
*a single-action ordering component* that in response to performance of only *a single action*, sends a request to a server system to order the identified item, the request including the identifier so that the server system can locate additional information needed to complete the order and so that the server system can *fulfill* the generated order to complete purchase of the item; and a *shopping cart ordering component* that in response to performance of an add-to-shopping-cart action, sends a request to the server system to add the item to a shopping cart.

9. A server system for generating an order

comprising:  
*a shopping cart ordering component*; and  
*a single-action ordering component* including:  
a data storage medium storing information for a plurality of users;  
a receiving component for receiving requests to order an item, a request including an indication of one of the plurality of users, the request being sent in response to only *a single action* being performed; and  
an order placement component that retrieves from the data storage medium information for the indicated user and that uses the retrieved information to place an order for the indicated user for the item; and an *order fulfillment component* that completes a purchase of the item in accordance with the order placed by the single-action ordering component.

11. A method for ordering an item using a client system, the method comprising:  
displaying information identifying the item and displaying an indication of *a single action* that is to be performed to order the identified item; and  
*in response to only the indicated single action being performed*, sending to a server system a request to order the identified item  
whereby the item is ordered independently of a *shopping cart model* and the order is *fulfilled* to complete a purchase of the item.

The district court interpreted the key "single action" claim limitation, which appears in each of the pertinent claims, to mean:

The term "single action" is not defined by the patent specification.... As a result, the term "single action" as used in the 411 patent appears to refer to one action (such as clicking a mouse button) that a user takes to purchase an item once the following information is displayed to the user: (1) a description of the item; and (2) a description of the single action the user must take to complete a purchase order for that item.

With this interpretation of the key claim limitation in hand, the district court turned to BN's accused ordering system. BN's short-cut ordering system, called "Express Lane," like the system contemplated by the patent, contains previously entered billing and shipping information for the customer. In one implementation, after a person is presented with BN's initial web page (referred to as the "menu page" or "home page"), the person can click on an icon on the menu page to get to what is called the "product page." BN's product page displays an image and a description

of the selected product, and also presents the person with a description of a single action that can be taken to complete a purchase order for the item. If the single action described is taken, for example by a mouse click, the person will have effected a \*1350 purchase order using BN's Express Lane feature.

BN's Express Lane thus presents a product page that contains the description of the item to be purchased and a "description" of the single action to be taken to effect placement of the order. Because only a single action need be taken to complete the purchase order once the product page is displayed, the district court concluded that Amazon had made a showing of likelihood of success on its allegation of patent infringement.

In response to BN's contention that substantial questions exist as to the validity of the 411 patent, the district court reviewed the prior art references upon which BN's validity challenge rested. The district court concluded that none of the prior art references anticipated the claims of the 411 patent under 35 U.S.C. § 102 (1994) or rendered the claimed invention obvious under 35 U.S.C. § 103 (1994).

### III

[1] The grant or denial of a preliminary injunction under 35 U.S.C. § 283 (1994) is within the sound discretion of the district court. Novo Nordisk of N. Am., Inc. v. Genentech, Inc., 77 F.3d 1364, 1367, 37 USPQ2d 1773, 1775 (Fed.Cir.1996). "An abuse of discretion may be established by showing that the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings." *Id.*

[2] As the moving party, Amazon is entitled to a preliminary injunction if it can succeed in showing: (1) a reasonable likelihood of success on the merits; (2) irreparable harm if an injunction is not granted; (3) a balance of hardships tipping in its favor; and (4) the injunction's favorable impact on the public interest. Reebok Int'l Ltd. v. J. Baker, Inc., 32 F.3d 1552, 1555, 31 USPQ2d 1781, 1783 (Fed.Cir.1994). "These factors, taken individually, are not dispositive; rather, the district court must weigh and measure each factor against the other factors and against the form and magnitude of the relief requested." Hybritech, Inc. v. Abbott Labs., 849 F.2d 1446, 1451, 7 USPQ2d 1191, 1195 (Fed.Cir.1988).

[3] Irreparable harm is presumed when a clear showing of patent validity and infringement has been made. Bell & Howell Document Mgmt. Prods. Co. v. Altek Sys., 132 F.3d 701, 708, 45 USPQ2d 1033, 1039-40 (Fed.Cir.1997) (citing H.H. Robertson v. United Steel Deck, Inc., 820 F.2d 384, 390, 2 USPQ2d 1926, 1929-30 (Fed.Cir.1987)). "This presumption derives in part from the finite term of the patent grant, for patent expiration is not suspended during litigation, and the passage of time can work irremediable harm." *Id.*

[4] Our case law and logic both require that a movant cannot be granted a preliminary injunction unless it establishes *both* of the first two factors, *i.e.*, likelihood of success on the merits and irreparable harm. Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc., 141 F.3d 1084, 1088, 46 USPQ2d 1257, 1259-60 (Fed.Cir.1998) (citing Reebok Int'l, 32 F.3d at 1555, 31 USPQ2d at 1783).

[5] In order to demonstrate a likelihood of success on the merits, Amazon must show that, in light of the presumptions and burdens that will inhere at trial on the merits, (1) Amazon will likely prove that BN infringes the 411 patent, and (2) Amazon's infringement claim will likely withstand BN's challenges to the validity and enforceability of the 411 patent. Genentech, Inc. v. Novo Nordisk, A/S., 108 F.3d 1361, 1364, 42 USPQ2d 1001, 1003 (Fed.Cir.1997). If BN raises a substantial question concerning either infringement or validity, *i.e.*, asserts an infringement or invalidity defense that the patentee cannot \*1351 prove "lacks substantial merit," the preliminary injunction should not issue. *Id.*

[6][7] Of course, whether performed at the preliminary injunction stage or at some later stage in the course of a particular case, infringement and validity analyses must be performed on a claim-by-claim basis. See, e.g., Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1247, 54 USPQ2d 1711, 1715 (Fed.Cir.2000) ("Literal infringement requires the patentee to prove that the accused device contains each limitation of the asserted claim(s)." (citations omitted)); Ortho Pharm. Corp. v. Smith, 959 F.2d 936, 942, 22 USPQ2d 1119, 1124 (Fed.Cir.1992) (concluding that all grounds of invalidity must be evaluated against individual claims, as required by the plain language of 35 U.S.C. § 282 (1994)). Therefore, in cases involving multiple patent claims, to demonstrate a likelihood of success on the merits, the patentee must demonstrate that it will likely prove infringement of one or more claims of the patents-in-suit, and that at least one of those same

allegedly infringed claims will also likely withstand the validity challenges presented by the accused infringer.

[8] Both infringement and validity are at issue in this appeal. It is well settled that an infringement analysis involves two steps: the claim scope is first determined, and then the properly construed claim is compared with the accused device to determine whether all of the claim limitations are present either literally or by a substantial equivalent. *See, e.g., Young Dental Mfg. Co. v. Q3 Special Prods., Inc.*, 112 F.3d 1137, 1141, 42 USPQ2d 1589, 1592 (Fed.Cir.1997). Conceptually, the first step of an invalidity analysis based on anticipation and/or obviousness in view of prior art references is no different from that of an infringement analysis. "It is elementary in patent law that, in determining whether a patent is valid and, if valid, infringed, the first step is to determine the meaning and scope of each claim in suit." *Lemelson v. Gen. Mills, Inc.*, 968 F.2d 1202, 1206, 23 USPQ2d 1284, 1287 (Fed.Cir.1992). "A claim must be construed before determining its validity just as it is first construed before deciding infringement." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 996 n. 7, 34 USPQ2d 1321, 1344 n. 7 (Fed.Cir.1995) (Mayer, J., concurring), aff'd, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

[9] Only when a claim is properly understood can a determination be made whether the claim "reads on" an accused device or method, or whether the prior art anticipates and/or renders obvious the claimed invention. *See id.* Because the claims of a patent measure the invention at issue, the claims must be interpreted and given the same meaning for purposes of both validity and infringement analyses. *See SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 859 F.2d 878, 882, 8 USPQ2d 1468, 1471 (Fed.Cir.1988). "A patent may not, like a 'nose of wax,' be twisted one way to avoid anticipation and another to find infringement." *Sterner Lighting, Inc. v. Allied Elec. Supply, Inc.*, 431 F.2d 539, 544 (5th Cir.1970) (citing *White v. Dunbar*, 119 U.S. 47, 51, 7 S.Ct. 72, 30 L.Ed. 303 (1886)). The court must properly interpret the claims, because an improper claim construction may distort the infringement and validity analyses. *See Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 450, 230 USPQ 416, 421 (Fed.Cir.1986).

#### IV

BN contends on appeal that the district court

committed legal errors that undermine the legitimacy of the preliminary injunction. In particular, BN asserts that the district court construed key claim limitations one way for purposes of its infringement analysis, and another way when considering BN's validity challenges. \*1352 BN asserts that under a consistent claim interpretation, its Express Lane feature either does not infringe the 411 patent, or that if the patent is interpreted so as to support the charge of infringement, then the claims of the patent are subject to a severe validity challenge. When the key claim limitations are properly interpreted, BN thus asserts, it will be clear that Amazon is not likely to succeed on the merits of its infringement claim, or that BN has succeeded in calling the validity of the 411 patent into serious question. In addition, BN asserts that the district court misunderstood the teaching of the prior art references, thereby committing clear error in the factual predicates it established for comprehension of the prior art references.

Amazon understandably aligns itself with the district court, asserting that no error of claim interpretation and no clear error in fact-finding has occurred that would undermine the grant of the preliminary injunction. We thus turn to the legal gist of this appeal.

#### V

It is clear from the district court's opinion that the meaning it ascribed to the "single action" limitation includes a temporal consideration. The "single action" to be taken to complete the purchase order, according to the district court, only occurs after other events have transpired. These preliminary events required pursuant to the district court's claim interpretation are the presentation of a description of the item to be purchased and the presentation of the single action the user must take to complete the purchase order for the item.

Amazon defends this temporal interpretation based on statements made by the applicant during prosecution of the patent. These statements, set forth below, are significant, because they were made at the point in the file history where the claims were amended to include the single action limitation.

In remarks accompanying an amendment dated February 26, 1999, Amazon provided the following comments (not limited to specific claims) to explain proposed amendments to the claims and to "clarify that the claimed single-action ordering technology is

different from the shopping cart metaphor": Applicants' single action ordering technology facilitates electronic ordering of items by reducing the number of purchaser interactions needed to place an order and reducing the amount of sensitive information that is transmitted between a client computer and a server computer when placing an order. To order an item using single-action ordering technology, the purchaser first locates the item by browsing through a catalog of items, by searching for the item, by selecting a link to the item, or by using any other means for locating the item. Once the item is located, the purchaser need only perform a single action to generate an order for the item and to fulfill that generated order. The single action may be, for example, the selecting of a button that is displayed on the web page or the speaking of a command. Because information (e.g., billing and shipping) about the purchaser has been saved (e.g., from a previous purchase), that information can be combined with the identification of the located item to generate and fulfill an order when the single action is performed.

On its face, this passage from the file history establishes that once a purchaser has located an item by *any* means, only a single action is required to generate an order for the item. Amazon, however, would put a special reading on the concept of a purchaser locating an item by any means. In Amazon's view of the file history, a purchaser has not located the item, for the purpose of counting the number of steps thereafter to generate the order, until the purchaser has made the decision to \*1353 purchase the item. As applied to the present case, Amazon argues that display of information about an item on BN's menu page does not indicate an item located with an intent to place the order; only after one moves from BN's menu page to its product page has one "located" the item for purposes of placing the order by a single action. Since it only takes a single action on BN's product page to place the order, Amazon contends that BN likely infringes the 411 patent.

[10] Amazon's reading of the key passage from the file history injects subjective notions into the infringement analysis. For example, if a would-be purchaser has made the decision to purchase an item *before* coming to BN's menu page, and there the purchaser sees the item displayed, Amazon would have to concede that no single action taken after the item display would achieve placement of the order. Instead, the purchaser would need to take a first action to advance from the menu page to the product page, and then a second action to place the order. We are not prepared

to assign a meaning to a patent claim that depends on the state of mind of the accused infringer. We thus reject Amazon's special meaning for the location of an item to be purchased.

[11] However, as we now discuss in detail, we ultimately agree with Amazon and construe all four independent claims (*i.e.*, claims 1, 6, 9, and 11) to call for the single action to be performed immediately after a display of information about an item and without any intervening action, but not necessarily immediately after the first display or every display.

Our analysis begins with the plain language of the claims themselves. The term "single action" appears in the independent claims of the 411 patent in the following forms: "in response to only a single action being performed" (claims 1 and 9), "single-action ordering component" (claims 1, 6, and 9), "in response to performance of only a single action" (claim 6), "in response to only the indicated single action being performed" (claim 11), and "displaying an indication of a single action that is to be performed to order the identified item" (claim 11).

In claims 1, 6, and 11, the context of the claim makes it clear that the single action is performed after some information about the item is displayed. Claim 1 provides for "displaying information identifying the item," and then immediately recites that "in response to only a single action being performed," a request to purchase the item is sent to a server system. Claim 6 provides for "a display component for displaying information identifying the item," and then immediately recites "the single action ordering component that in response to performance of only a single action" sends a request to purchase the item to a server system. Claim 11 provides for "displaying information identifying the item and displaying an indication of the single action," and then immediately recites that "in response to only the indicated single action being performed" a request to purchase the item is sent to a server system. The context also indicates that the single action is performed, or is capable of being performed, after information about the item is displayed, without any intervening action. Nothing suggests, however, that the single action must be performed after every display or even immediately after the first display of information. Claim 9 does not explicitly provide for displaying information. It merely recites that a request to order an item is "sent in response to only a single action being performed." However, although claim 9 does not recite "displaying," the written description defines the claim 9 language of "single action being performed" to

require that information has been displayed.

The ordinary meaning of “single action” as used in the various claims is straightforward,\*1354 but the phrase alone does not indicate when to start counting actions. Therefore, we must look first to the written description of the 411 patent for further guidance.

The written description supports a construction that after information is “displayed,” single-action ordering is an option available to the user, and the counting falls within the scope of the claim when single-action ordering is actually selected by the user. To the extent that the claims are considered ambiguous on this point, the written description defines “single action” to require as much. In the Summary of the Invention, the written description describes an embodiment that “displays information that identifies the item and displays an indication of an action ... [and][i]n response to the indicated action being performed” orders the item. Col. 2, ll. 54-59. Similarly, in the Detailed Description of the Invention, the written description states that “[o]nce the description of an item is displayed, the purchaser need only take a single action.” Col. 3, ll. 65-66. This is consistent for all of the disclosed embodiments.

Therefore, neither the written description nor the plain meaning of the claims require that single action ordering be possible after each and every display of information (or even immediately after the first display of information). The plain language of the claims and the written description require only that single action ordering be possible after some display of information. Indeed, the written description allows for and suggests the possibility that previous displays of information will have occurred before the display immediately preceding an order.

The Detailed Description of the Invention describes the first figure (Fig.1A) by stating that “this example Web page [containing a summary description of the item] was sent ... when the purchaser requested to review *detailed* information about the item.” Col. 4, ll. 7-9 (emphasis added). Given that the written description earlier described on-line purchasing as involving “browsing” (col.1, l.55), it is reasonable to conclude that some less detailed information about the item has already been displayed.

This passage also allows for the possibility that the purchaser sees a display of the less detailed information on an item, decides to browse elsewhere, then ultimately returns to obtain more detailed information on the item and to finally order it. Thus,

there could be intermittent displays of information on an item, in addition to successive displays of information on an item, and each and every display need not have single action ordering capability.

The above passages indicate that the written description is not concerned with what happens on every display of information, or even immediately after the first display, but only that there be some display from which single action ordering can be performed.

The prosecution history of the 411 patent also supports the above claim construction. In response to an office action, in the passage from the prosecution history cited earlier in this opinion, the patentee stated “a purchaser first locates the item [1] by browsing through a catalog of items, [2] by searching for the item, [3] by selecting a link to the item, or [4] by using any other means for locating the item. Once the item is located, the purchaser need only perform a single action to generate an order” (enumeration added). This enumeration of the various ways an item may be located allows for information on the item to be displayed prior to single action ordering being enabled. This is seen most clearly in the third enumerated method, “selecting a link to the item.” If it is to serve as “a link to the item” (emphasis added), then there must be some display of \*1355 information on the item either in the link or around the link. Thus, information on the item may sometimes be displayed before “locating” the item (and, hence, before single action ordering is enabled).

Likewise, the first enumerated method (browsing) is explained in the written description to entail requesting “detailed information” about an item before single action ordering is enabled. This presumes that “un-detailed” or general information was previously displayed. Similarly, the second enumerated method (searching) commonly entails first displaying information on various items that match a search string, such as a list of all books written by a particular author or dealing with a particular subject. The purchaser then typically selects one of these items to receive more detailed information, at which point the selected item is presumably “located” and single action ordering is enabled.

[12] When the correct meaning of the single action limitation is read on the accused BN system, it becomes apparent that the limitations of claim 1 are likely met by the accused system. The evidence on the record concerning the operation of BN's "Express Lane" feature is not in dispute. At the time that the 411 patent was issued, BN offered customers two purchasing options. One was called "Shopping Cart," and the other was called "Express Lane." The Shopping Cart option involved the steps of adding items to a "virtual" shopping cart and then "checking out" to complete the purchase. In contrast, the Express Lane option allowed customers who had registered for the feature to purchase items simply by "clicking" on the "Express Lane" button provided on the "detail page" or "product page" describing and identifying the book or other item to be purchased. The text beneath the Express Lane button invited users to "Buy it now with just 1 click!"

BN's allegedly infringing web site thus may be characterized as having "page 1," (the "menu" page) which displays a catalog listing several items but which does not contain an "order" icon, and "page 2," (the "product" or "detail" page) which includes information on one item and also shows an order icon. Someone shopping at this web site would look at the catalog on page 1 and perform a first click to go to page 2. Once at page 2, a second click on the ordering icon would cause the order request to be sent. Under the claim construction set forth herein, BN likely infringes claim 1 because on page 2, the item is there displayed (meeting step 1 of the claim) and only a single action thereafter causes the order request to be transmitted (meeting step 2). The method implemented on page 1 of the BN web site does not infringe, but the method on page 2 does. This has nothing to do with the state of mind of the purchaser, but simply reflects the ordinary meaning of the words of the claim in the context of the written description and in light of the prosecution history.

We recognize that under this construction, claim 1 would appear to read on the prior art shopping cart model (because the final page of a shopping cart model both displays the item to be purchased in a list of selected products and sends the order request signal in response to the single next action of clicking on the "confirm purchase" icon). However, the shopping cart model is expressly excluded from claim 1 by the whereby clause at the end of the claim.

[13] We note that the district court concluded that "[b]arnesandnoble.com infringes claims 1, 2, 3, 5, 11, 12, 12, 14, 15, 16, 17, 21, 22, 23, [and] 24," and "also

infringes claims 6-10 of the 411 patent." However, the relevant determination at \*1356 the preliminary injunction stage is substantial likelihood of success by Amazon of its infringement claims, not a legal conclusion as to the ultimate issue of infringement. We therefore interpret the district court's conclusions as determining that Amazon had demonstrated a substantial likelihood of establishing literal infringement of the enumerated claims.

## B

According to the plain language of claim 2, the point of reference from which to start "counting clicks" does not begin until "information indicating the single action" to be performed is displayed (*i.e.*, when the "EXPRESS LANE" or "BUY NOW" button is displayed). Amazon is thus correct in its assertion that only a single action is required after that point to send a request to order an item using BN's Express Lane feature. For this reason, we cannot say that BN raised a substantial question of noninfringement of claim 2 in the 411 patent with respect to the "single action" limitation at this stage in the litigation.

We point out that BN mounted an additional noninfringement argument with respect to claims 1, 2, and 11 based on the term "shopping cart model" in the "whereby" clause of those claims. Claims 1 and 2 require that the item be ordered "without using a shopping cart model." Similarly, claim 11 requires that the item be ordered "independently of a shopping cart model." Thus, according to BN, even if an ordering system accused of infringement used the claimed "single action" technology, it would still not infringe claims 1, 2, or 11 so long as the single action technology was used *within* the paradigm of a "shopping cart model."

Accordingly, BN argues that, even if its Express Lane feature is said to use single action technology within the scope of the claims in the 411 patent, the Express Lane feature is nevertheless a "shopping cart model" because, according to the written description, "shopping cart model" should be construed to include models in which checkout happens automatically when an item is selected for purchase. In fact, the written description of the 411 patent does mention alternative prior art shopping cart models having the feature that "when a purchaser selects any one item, then that item is 'checked out' by automatically prompting the user for the billing and shipment information." Col. 2, ll. 24-27. Thus, BN argues that its Express Lane system does not infringe because it is

an embodiment of such an alternative shopping cart model admitted to be prior art in the written description of the 411 patent.

[14] The district court construed "shopping cart model" to mean "a method for on-line ordering in which a user selects and accumulates items to be purchased while browsing a merchant's site and then must proceed to one or more checkout or confirmation steps in order to complete the purchase." BN argues that this interpretation contradicts the written description of the 411 patent because it allegedly excludes the alternative shopping cart models mentioned in the written description. However, we discern no error with the district court's interpretation of "shopping cart model," because it is consistent with the written description and with the comments made by Amazon discussing the term during prosecution of the 411 patent, as discussed earlier with reference to the "single action" limitation. The district court's interpretation does not improperly exclude the alternative shopping cart models mentioned by BN, because although an item may be checked out automatically when using these alternative shopping cart models, the written description states that the user must still provide billing and shipping information (unless the information is "pre-filled" with information that was provided by the user when placing a previous \*1357 order). Additionally, regardless of whether the "purchaser-specific order information" is pre-filled or not, the user must still perform at least one confirmation step once the purchaser is presented with the order web page to complete the purchase. *See* col. 2, ll. 24-36. It follows, then, that BN's noninfringement argument based on characterizing its Express Lane feature as a "shopping cart model" fails because once a purchaser clicks on the "Express Lane" ordering button, no additional checkout or confirmation steps are required before a request to order the item is sent to the server system.

Having considered and rejected BN's alternative noninfringement arguments, we find that Amazon has carried its merits burden with respect to likely infringement of Claim 2. We note there is some redundancy between claims 1 and 2 under the claim interpretation set forth herein. However, the two claims are not identical in scope. For example, claim 2 would not read on a method where the first page of a web site includes a textual message such as "click directly on the picture of any item displayed on any of the following pages to place an order." Under such a method, there would never be a page where both the item and the single action to be taken to order the item

would be displayed. Claim 2 would not be infringed by such a system, but claim 1 would.

## C

We note further that Amazon has also made out its likelihood of success case with respect to infringement of claim 11. Claim 11 is similar to claim 2 because it also includes the limitation requiring "displaying an indication of a single action that is to be performed." For the reasons noted above with respect to claim 2, the district court was correct in concluding that BN had not raised a substantial question of noninfringement regarding claim 11.

## D

In view of our interpretation of "single action," we find that the district court correctly concluded that BN had not raised a substantial question of noninfringement regarding claims 6 and 9 with respect to the "single action" limitation.

[15] However, we note that BN also mounted an additional noninfringement argument with respect to claims 6 and 9 based on the terms "fulfill" and "fulfillment" in those claims. Claim 6 requires that the server system have the capability to "fulfill the generated order to complete purchase of the item." Similarly, claim 9 requires that the single action ordering component of the server system must include "an order fulfillment component that completes a purchase of the item." BN argues that "fulfill" and "fulfillment" refer to all of the steps required to pick the product from a warehouse shelf, pack it for shipment, and ship it to the customer. Presumably, BN believes that such an interpretation would lead to noninfringement of claims 6 and 9, at least under a theory of direct infringement.

The district court ruled that the various forms of "fulfill" throughout the claims refer to order fulfillment application software executing on the server system, as opposed to the physical steps of handling or packing tangible items. We discern no error with this interpretation. As BN admits, the plain language of claims 6 and 9 require that the fulfillment steps be capable of being performed by the server system (as in claim 6) and that the order fulfillment component be part of the server system (as in claim 9). Obviously a server system, as the term is used in the 411 patent to refer to a computer system (*see, e.g.*, col. 1, ll. 15-16), is incapable of picking a product from a

warehouse shelf, packing it for shipment, and shipping it to the customer. Therefore the terms "fulfill" and its cognates are properly limited to \*1358 refer to order fulfillment application software executed on the server system.

## E

After full review of the record before us, we conclude that under a proper claim interpretation, Amazon has made the showing that it is likely to succeed at trial on its infringement case. Given that we conclude that Amazon has demonstrated likely literal infringement of at least the four independent claims in the 411 patent, we need not consider infringement under the doctrine of equivalents. The question remaining, however, is whether the district court correctly determined that BN failed to mount a substantial challenge to the validity of the claims in the 411 patent.

## VII

The district court considered, but ultimately rejected, the potentially invalidating impact of several prior art references cited by BN. Because the district court determined that BN likely infringed all of the asserted claims, it did not focus its analysis of the validity issue on any particular claim. Instead, in its validity analysis, the district court appears to have primarily directed its attention to determining whether the references cited by BN implemented the single action limitation.

[16] At the preliminary injunction stage of the litigation, the district court sits to deliver an equitable determination, and issues of fact naturally play into the final judgment of the district court. For example, in an invalidity analysis, the district court must assess the meaning of the prior art references cited to support the validity challenge. However, what a reference teaches is a question of fact. *In re Beattie*, 974 F.2d 1309, 1311, 24 USPQ2d 1040, 1041-42 (Fed.Cir.1992). Consequently, the district court necessarily makes fact-findings, explicitly or implicitly, concerning the meaning of the asserted references. On the basis of the district court's reading of the references, it makes judgments as to the validity of the patent in suit. We review the district court's assessment of the prior art references for clear error. See *id.*; *Novo Nordisk*, 77 F.3d at 1367, 37 USPQ2d at 1775 (Fed.Cir.1996) (stating that an abuse of discretion in granting a preliminary injunction may be

established by showing that the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings).

In this case, we find that the district court committed clear error by misreading the factual content of the prior art references cited by BN and by failing to recognize that BN had raised a substantial question of invalidity of the asserted claims in view of these prior art references.

[17] Validity challenges during preliminary injunction proceedings can be successful, that is, they may raise substantial questions of invalidity, on evidence that would not suffice to support a judgment of invalidity at trial. See, e.g., *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 1352, 54 USPQ2d 1299, 1308 (Fed.Cir.2000) (holding that the allegedly anticipatory prior art references sufficiently raised a question of invalidity to deny a preliminary injunction, even though summary judgment of anticipation based on the same references was not supported). The test for invalidity at trial is by evidence that is clear and convincing. *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1396-97 (Fed.Cir.1999). To succeed with a summary judgment motion of invalidity, for example, the movant must demonstrate a lack of genuine dispute about material facts and show that the facts not in dispute are clear and convincing in demonstrating\*1359 invalidity. *Robotic Vision Sys., Inc. v. View Eng'g, Inc.*, 112 F.3d 1163, 1165, 42 USPQ2d 1619, 1621 (Fed.Cir.1997). In resisting a preliminary injunction, however, one need not make out a case of actual invalidity. Vulnerability is the issue at the preliminary injunction stage, while validity is the issue at trial. The showing of a substantial question as to invalidity thus requires less proof than the clear and convincing showing necessary to establish invalidity itself. That this is so is plain from our cases.

[18][19] When moving for the extraordinary relief of a preliminary injunction, a patentee need not establish the validity of a patent beyond question. *Atlas Powder Co. v. Ireco Chem.*, 773 F.2d, 1230, 1233, 227 USPQ 289, 292 (Fed.Cir.1985). The patentee must, however, present a clear case supporting the validity of the patent in suit. See *Nutrition 21 v. United States*, 930 F.2d 867, 871, 18 USPQ2d 1347, 1349 (Fed.Cir.1991). Such a case might be supported, for example, by showing that the patent in suit had successfully withstood previous validity challenges in other proceedings. Further support for such a clear case

might come from a long period of industry acquiescence in the patent's validity. See 7 Donald S. Chisum, *Chisum on Patents* § 20.04[1][c], at 20-673 to 20-693 (1998) (citing cases). Neither of those considerations benefit Amazon in this case, however, because the 411 patent has yet to be tested by trial, and it was issued only a few weeks before the start of this litigation.

In *Helifix*, we recently confronted the situation in which a district court had granted a motion of summary judgment of invalidity based on allegedly anticipatory prior art references, and shortly thereafter denied a motion for a preliminary injunction based on a validity challenge using the same prior art references. 208 F.3d at 1344-45, 54 USPQ2d at 1302. On appeal, the patentee sought reversal of the summary judgment and claimed entitlement to a preliminary injunction. We held that the summary judgment could not stand, because disputed issues of material fact on invalidity remained for resolution at trial. *Id.* at 208 F.3d 1352, 54 USPQ2d 1308. Nonetheless, we expressly held that the quantum of evidence put forth-while falling short of demonstrating invalidity itself-was sufficient to prevent issuance of the preliminary injunction. *Id.* Particularly instructive for purposes of this case is the treatment of the anticipation issue in *Helifix*. A particular reference which did not on its face disclose all the limitations of the claim in suit was argued to be anticipatory, even though there was a conflict in the testimony as to whether the reference would have taught one of ordinary skill in the art the claim limitations not expressly stated on the face of the reference. Although insufficient to demonstrate invalidity for the purposes of the summary judgment motion, the reference was enough to prevent issuance of the preliminary injunction. *Id.* at 208 F.3d 1351-52, 54 USPQ2d at 1307-08.

The situation before us is similar. Here, we have several references that were urged upon the court as invalidating the asserted claims. The district court dismissed those references, for purposes of its invalidity analysis, because it did not perceive them to recite each and every limitation of the claims in suit. As we explain below in our review of the asserted prior art in this case, each of the asserted references clearly teaches key limitations of the claims of the patent in suit. BN argued to the district court that one of ordinary skill in the art could fill in the gaps in the asserted references, given the opportunity to do so at trial.

[20] When the heft of the asserted prior art is assessed in light of the correct legal standards, we conclude that

BN has \*1360 mounted a serious challenge to the validity of Amazon's patent. We hasten to add, however, that this conclusion only undermines the prerequisite for entry of a preliminary injunction. Our decision today on the validity issue in no way resolves the ultimate question of invalidity. That is a matter for resolution at trial. It remains to be learned whether there are other references that may be cited against the patent, and it surely remains to be learned whether any shortcomings in BN's initial preliminary validity challenge will be magnified or dissipated at trial. All we hold, in the meantime, is that BN cast enough doubt on the validity of the 411 patent to avoid a preliminary injunction, and that the validity issue should be resolved finally at trial.

## A

One of the references cited by BN was the "CompuServe Trend System." The undisputed evidence indicates that in the mid-1990s, CompuServe offered a service called "Trend" whereby CompuServe subscribers could obtain stock charts for a surcharge of 50 cents per chart. Before the district court, BN argued that this system anticipated claim 11 of the 411 patent. The district court failed to recognize the substantial question of invalidity raised by BN in citing the CompuServe Trend reference, in that this system appears to have used "single action ordering technology" within the scope of the claims in the 411 patent.

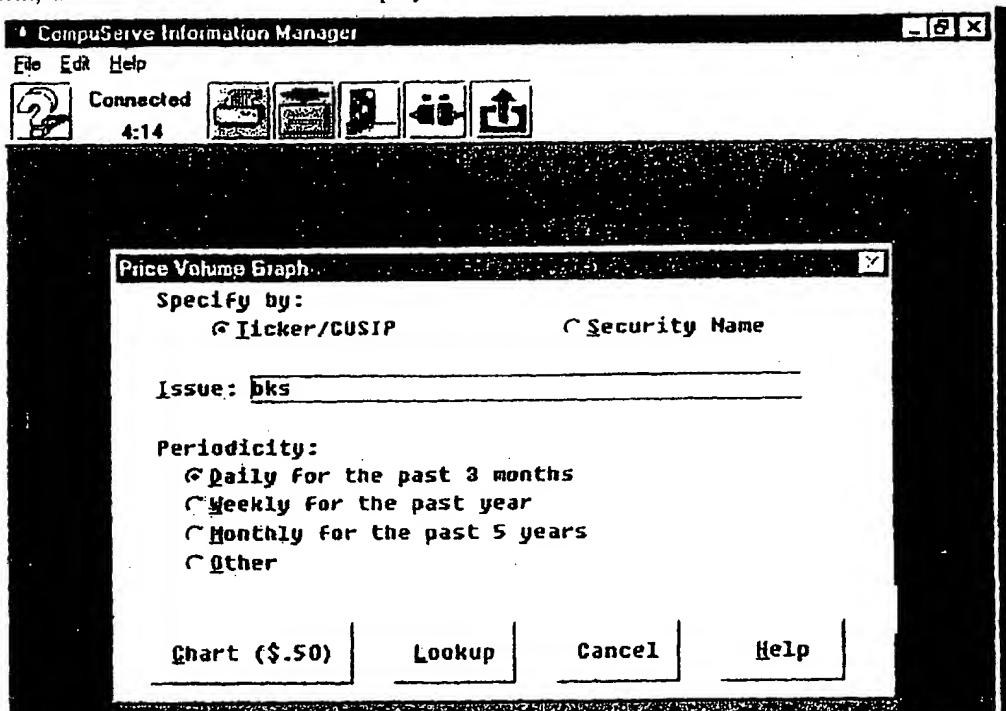
First, the district court dismissed the significance of this system partly on the basis that "[t]he CompuServe system was not a world wide web application." This distinction is irrelevant, since none of the claims mention either the Internet or the World Wide Web (with the possible exception of dependent claim 15, which mentions HTML, a program commonly associated with both the Internet and the World Wide Web). Moreover, the 411 patent specification explicitly notes that "[o]ne skilled in the art would appreciate that the single-action ordering techniques can be used in various environments other than the Internet." Col. 6, ll. 22-24.

More importantly, one of the screen shots in the record (reproduced below) indicates that with the CompuServe Trend system, once the "item" to be purchased (*i.e.*, a stock chart) has been displayed (by typing in a valid stock symbol), only a single action (*i.e.*, a single mouse click on the button labeled "Chart (\$ .50)") is required to obtain immediate electronic delivery (*i.e.*, "fulfillment") of the item. Once the

button labeled "C hart (\$.50)" was activated by a purchaser, an electronic version of the requested stock chart would be transmitted to the purchaser and displayed on the purchaser's computer screen, and an automatic process to charge the purchaser's account 50 cents for the transaction would be initiated. In terms of the language of claims 2 and 11 in the CompuServe Trend system, the item to be ordered is "displayed"

when the screen echoes back the characters of the stock symbol typed in by the purchaser before clicking on the ordering button.

\*1361



The evidence before us indicates that the billing process for the electronic stock chart would not actually commence until the client system sent a message to the server system indicating that the electronic stock chart had been received at the client system. In its brief, Amazon argues that this feature of the CompuServe Trend system amounts to an additional "confirmation step necessary to complete the ordering process," and that the CompuServe Trend system therefore does not use "single action" technology within the scope of the claims in the 411 patent. However, all of the claims only require sending a *request* to order an item in response to performance of only a single action. In the CompuServe Trend system, this requirement is satisfied when a purchaser performs the single action of "clicking" on the button labeled "C hart (\$.50)." The claims do not require that the billing process for the item must also be initiated in response to performance of the single action. Furthermore, in the CompuServe Trend system, the "action" of sending a

message from the client system to the server system confirming successful reception of the electronic stock chart is performed automatically, without user intervention.

At oral argument, Amazon's counsel articulated three differences between the CompuServe Trend system and the claimed invention. First, Amazon's counsel repeated the district court's reasoning, and asserted that the CompuServe Trend system is not on the Internet or the World Wide Web. As mentioned above, the 411 patent specification indicates that this distinction is irrelevant.

Second, Amazon's counsel claimed that the CompuServe Trend system was different from the claims of the 411 patent because it required a user to "log in" at the beginning of each session, and therefore would not send the claimed "identifier" along with a request to purchase each item. However, claim 11 does not require transmission of an identifier along with a request to order an item. This requirement\*1362 is found only in claims 1, 6, and 9,

and their respective dependent claims.

On its face, the CompuServe Trend reference does not mention transmission of the claimed identifier along with a request to purchase each item. Nor does the evidence in the record at this stage indicate that the CompuServe Trend system transmitted such an identifier. BN has therefore not demonstrated that the CompuServe Trend reference anticipates the asserted claims of the 411 patent requiring transmission of such an identifier with the degree of precision necessary to obtain summary judgment on this point. However, as noted above, validity challenges during preliminary injunction proceedings can be successful on evidence that would not suffice to support a judgment of invalidity at trial. *See Helifix, 208 F.3d at 1352, 54 USPQ2d at 1308*. The record in this case is simply not yet developed to the point where a determination can be made whether the CompuServe Trend system transmits the claimed identifier along with a request to order an item, or whether this limitation is obvious in view of the prior art. For example, United States Patent No. 5,708,780 ("the 780 patent") (a reference cited by BN which is discussed more fully below), describes "forwarding a service request from the client to the server and appending a session identification (SID) to the request and to subsequent service requests from the client to the server within a session of requests." *See 780 patent*, col. 3, ll. 12-16.

Moreover, the 411 patent specification itself dismisses the distinction between ordering systems in which an identifier is transmitted along with each request to order an item, and systems in which a user logs in once at the beginning of each session. *See 411 patent* at col. 10, ll. 6-10 ("[T]he purchaser can be alternatively identified by a unique customer identifier that is provided by the customer when the customer initiates access to the server system and sent to the server system with each message.").

The final distinction drawn by Amazon's counsel between the claimed invention and the CompuServe Trend system was that—according to Amazon—the *only* reason that a purchaser would "call up" the screen would be to actually order an electronic stock chart, and that therefore an earlier action taken by a purchaser to invoke the screen should count as an extra purchaser action. According to this argument, the CompuServe Trend system would not meet the "single action" limitation because at least two actions would need to be taken to order an item: one action to invoke the ordering screen, and a second action to click on the ordering button. However, as the screen

shot plainly indicates, a purchaser could use the display screen for purposes other than to order an electronic stock chart (e.g., to "Lookup" a stock symbol). Furthermore, to the extent that Amazon argues that the CompuServe Trend fails to meet the "single action" limitation due to the "click" necessary to activate the stock chart ordering screen in the first place, Amazon also admits that BN's Express Lane feature fails to meet the same limitation because of the "click" required to proceed from a menu page to a product page when using the Express Lane feature.

As the CompuServe Trend stock chart ordering screen indicates, we note that once a purchaser types in a valid stock symbol, the screen displays both "information identifying the item" (*i.e.*, the stock symbol identifying the desired electronic stock chart) *and* an indication of the "single action" to be performed to order the identified item (*i.e.*, clicking on the button labeled "Cart (\$.<sup>50</sup>)"). Therefore, the substantial question of invalidity raised by the CompuServe Trend reference is the same regardless of whether one considers claims explicitly requiring that both of \*1363 these pieces of information be displayed (*i.e.*, claims 2 and 11) or claims requiring that only the "information identifying the item" be displayed (*i.e.*, claims 1, 6, and 9).

In view of the above, we conclude that the district court erred in failing to recognize that the CompuServe Trend reference raises a substantial question of invalidity. Whether the CompuServe Trend reference either anticipates and/or renders obvious the claimed invention in view of the knowledge of one of ordinary skill in the relevant art is a matter for decision at trial.

## B

In addition to the CompuServe Trend system, other prior art references were cited by BN, but ultimately rejected by the district court. For example, BN's expert, Dr. Lockwood, testified that he developed an on-line ordering system called "Web Basket" in or around August 1996. The Web Basket system appears to be an embodiment of a "shopping cart ordering component": it requires users to accumulate items into a virtual shopping basket and to check these items out when they are finished shopping. Because it is an implementation of a shopping cart model, Web Basket requires several confirmation steps for even pre-registered users to complete their purchases.

However, despite the fact that Web-Basket is an

embodiment of a shopping cart model, it is undisputed that Web-Basket implemented the Internet Engineering Task Force ("IETF") draft "cookie" specification, and stored a customer identifier in a cookie for use by a web server to retrieve information from a database. In other words, when a user first visited the Web-Basket site, a cookie (*i.e.*, a file stored by the server system on the client system for subsequent use) was used to store an identifier on the user's computer. The first time that a user purchased an item on the Web Basket site, the information entered by the user necessary to complete the purchase (*e.g.*, name, address) would be stored in a database on the server system indexed by an identifier stored in the cookie on the client system. On subsequent visits, the cookie could be used to retrieve the user identifier, which would serve as the key to retrieve the user's information from the database on the server system.

At the preliminary injunction stage, based on Dr. Lockwood's declaration and testimony during the hearing, BN argued that the Web Basket reference-combined with the knowledge of one of ordinary skill in the art at the relevant time-renders obvious the claimed invention.<sup>FNI</sup>

FNI. On appeal, BN asserts that a defense of anticipation had been raised based on the Web Basket system by Dr. Lockwood's claim charts. However, our review of the record indicates that Dr. Lockwood admitted that at least one claim limitation in each of the independent claims may not have been anticipated by the Web Basket system. Therefore, at this stage, we address only the obviousness issues related to the Web Basket system.

The district court concluded that the Web Basket system was "inconsistent with the single-action requirements of the 411 patent" because "it requires a multiple-step ordering process from the time that an item to be purchased is displayed." However, as discussed earlier, the undisputed evidence demonstrates that the accused BN Express Lane feature also requires a multiple-step ordering process (*i.e.*, at least two "clicks") *from the time that an item to be purchased is first displayed on the menu page*, yet the district court concluded that BN's Express Lane feature infringed all of the asserted claims of the 411 patent. The district court's failure to recognize the inconsistency in these two conclusions was erroneous.

Moreover, the district court did not address the

"cookie" aspects of the Web Basket reference, and failed to recognize \*1364 that a reasonable jury could find that the step of storing purchaser data on the server system for subsequent retrieval indexed by an identifier transmitted from the client system was anticipated and/or rendered obvious by the Web Basket reference.

[21] The district court dismissed BN's obviousness defense, apparently based on an alleged "admission" by BN's expert. In a section of its opinion entitled "Summary of Prior Art," the district court stated: On the question of obviousness, the Court finds that the differences between the prior art references submitted by Defendants and the 411 patent claims are significant. Moreover, there is insufficient evidence in the record regarding a teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art of e-commerce to combine the references. The Court finds particularly telling Dr. Lockwood's admission that it never occurred to him to modify his Web Basket program to enable single-action ordering, despite his testimony that such a modification would be easy to implement. This admission serves to negate Dr. Lockwood's conclusory statements that prior art references teach to one of ordinary skill in the art the invention of the 411 patent.

Thus, the district court apparently based its conclusion of nonobviousness on Dr. Lockwood's "admission" that he personally never thought of combining or modifying the prior art to come up with the claimed "single action" invention. This approach was erroneous as a matter of law. Whatever Dr. Lockwood did or did not *personally* realize at the time based on his actual knowledge is irrelevant. The relevant inquiry is what a hypothetical ordinarily skilled artisan would have gleaned from the cited references at the time that the patent application leading to the 411 patent was filed. See *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1453, 223 USPQ 603, 612-14 (Fed.Cir.1984) (discussing the origin and significance of the hypothetical ordinarily skilled artisan in detail).

## C

BN also presented as a prior art reference an excerpt from a book written by Magdalena Yesil entitled *Creating the Virtual Store* that was copyrighted in 1996. Before the district court, BN argued that this reference anticipated every limitation of claim 11. Before this court, BN also alleges that many other

claim limitations are disclosed in the reference, but that there was insufficient time to prepare testimony concerning these limitations, given the district court's accelerated briefing and hearing schedule at the preliminary injunction stage.

In general terms, the reference apparently discusses software to implement a shopping cart ordering model. However, BN focuses on the following passage from Appendix F of the book:

*Instant Buy Option*

Merchants also can provide shoppers with an Instant Buy button for some or all items, enabling them to skip check out review. This provides added appeal for customers who already know the single item they want to purchase during their shopping excursion.

The district court dismissed the significance of this passage, stating that "[r]ead in context, the few lines relied on by Defendants appear to describe only the elimination of the checkout review step, leaving at least two other required steps to complete a purchase." However, the district court failed to recognize that a reasonable jury could find that this passage provides a motivation to modify shopping cart ordering software to skip unnecessary steps. \*1365 Thus, we find that this passage, viewed in light of the rest of the reference and the other prior art references cited by BN, raises a substantial question of validity with respect to the asserted claims of the 411 patent.

D

Another reference cited by BN, a print-out from a web page describing the "Oliver's Market" ordering system, generally describes a prior art multi-step shopping cart model. BN argued that this reference anticipates at least claim 9. The reference begins with an intriguing sentence:

A single click on its picture is all it takes to order an item.

Read in context, the quote emphasizes how easy it is to order things on-line. The district court failed to recognize that a reasonable jury could find that this sentence provides a motivation to modify a shopping cart model to implement "single-click" ordering as claimed in the 411 patent. In addition, the district court failed to recognize that other passages from this reference could be construed by a reasonable jury as anticipating and/or rendering obvious the allegedly novel "single action ordering technology" of the 411 patent. For example, the reference states that "[o]ur solution allows one-click ordering anywhere you see a

product picture or a price." The reference also describes a system in which a user's identifying information (e.g., username and password) and purchasing information (e.g., name, phone number, payment method, delivery address) is captured and stored in a database "the very first time a user clicks on an item to order," and in which a corresponding cookie is stored on the client system. In this system, the stored information may be retrieved automatically during subsequent visits by reading the cookie. All of these passages further support BN's argument that a substantial question of validity is raised by this prior art reference, either alone or in combination with the other cited references.

E

[22] The final reference considered by the district court is the 780 patent, entitled "Internet server access control and monitoring systems." Based on a patent application filed in the United States before the application that matured into Amazon's 411 patent, the 780 patent qualifies as prior art pursuant to 35 U.S.C. § 102(e) (1994). Before the district court, BN argued that this reference anticipated at least claim 1 of the 411 patent.

In the preferred embodiment described in the 780 patent, a user browses the web conventionally, and a content server provides web documents to the user and determines when the user seeks access to "controlled" content, i.e., web pages for which the user needs authorization to browse. 780 patent, col. 7, ll. 35-38. The 780 patent describes a system in which controlled pages are returned to the user's browser when an authorized request is received by the content server. We note that the 780 patent describes "forwarding a service request from the client to the server and appending a session identification (SID) to the request and to subsequent service requests from the client to the server within a session of requests." Id. at col. 3, ll. 12-16.

We conclude that the district court failed to recognize that a reasonable jury could find that such "items" (i.e., controlled pages) fall within the scope of the claimed invention, and that delivery of these controlled pages based on receiving an authorized request from a user's browser may constitute a "single action ordering component" within the meaning of the claims in the 411 patent. Therefore, the 780 patent is yet another prior art reference cited by BN which tends to raise a substantial \*1366 question of validity, either alone or in combination with the other cited references.

[23] The district court also cited certain "secondary considerations" to support its conclusion of nonobviousness. Specifically, the district court cited (1) "copying of the invention" by BN and other e-commerce retailers following Amazon's introduction of its "1-Click®" feature, and (2) "the need to solve the problem of abandoned shopping carts." First, we note that evidence of copying Amazon's "1-Click®" feature is legally irrelevant unless the "1-Click®" feature is shown to be an embodiment of the claims. To the extent Amazon can demonstrate that its "1-Click®" feature embodies any asserted claims of the 411 patent under the correct claim interpretation, evidence of copying by BN and others is not sufficient to demonstrate nonobviousness of the claimed invention, in view of the substantial question of validity raised by the prior art references cited by BN and discussed herein.

[24] With respect to the abandoned shopping carts, this problem is not even mentioned in the 411 patent. Moreover, Amazon did not submit any evidence to show either that its commercial success was related to the "1-Click®" ordering feature, or that single-action ordering caused a reduction in the number of abandoned shopping carts. Therefore, we fail to see how this "consideration" supports Amazon's nonobviousness argument.

#### CONCLUSION

While it appears on the record before us that Amazon has carried its burden with respect to demonstrating the likelihood of success on infringement, it is also true that BN has raised substantial questions as to the validity of the 411 patent. For that reason, we must conclude that the necessary prerequisites for entry of a preliminary injunction are presently lacking. We therefore vacate the preliminary injunction and remand the case for further proceedings.

#### COSTS

#### VACATED AND REMANDED

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- [2000 WL 34003925](#) (Appellate Brief) Reply Brief

for Defendants-Appellants Barnesandnoble.com Inc. and Barnesandnoble.com LLC (Apr. 10, 2000)  
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- [2000 WL 34003325](#) (Appellate Brief) Brief of Plaintiff/Appellee Amazon.com, Inc. (Mar. 23, 2000)  
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- [2000 WL 34003924](#) (Appellate Brief) Brief for Defendants-Appellants Barnesandnoble.com Inc. and Barnesandnoble.com LLC (Feb. 14, 2000) Original Image of this Document with Appendix (PDF)
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